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PROCEEDINGS

ARBITRATION

BETWEEN THE

WESTERN RAILROADS

AND THE

BROTHERHOOD OF LOCOMOTIVE
ENGINEERS

AND THE

BROTHERHOOD OF LOCOMOTIVE
FIREMEN AND ENGINEMEN

Submitted to Arbitration, under the Act of July 15, 1913
By Agreement Dated August 3, 1914

CHICAGO, ILLINOIS

Argument Nos. 73-77, Pages 7393-7828

Employes' Brief, Pages 1-97

Railroads' Brief, Pages 1-108

Award, Pages 1-32

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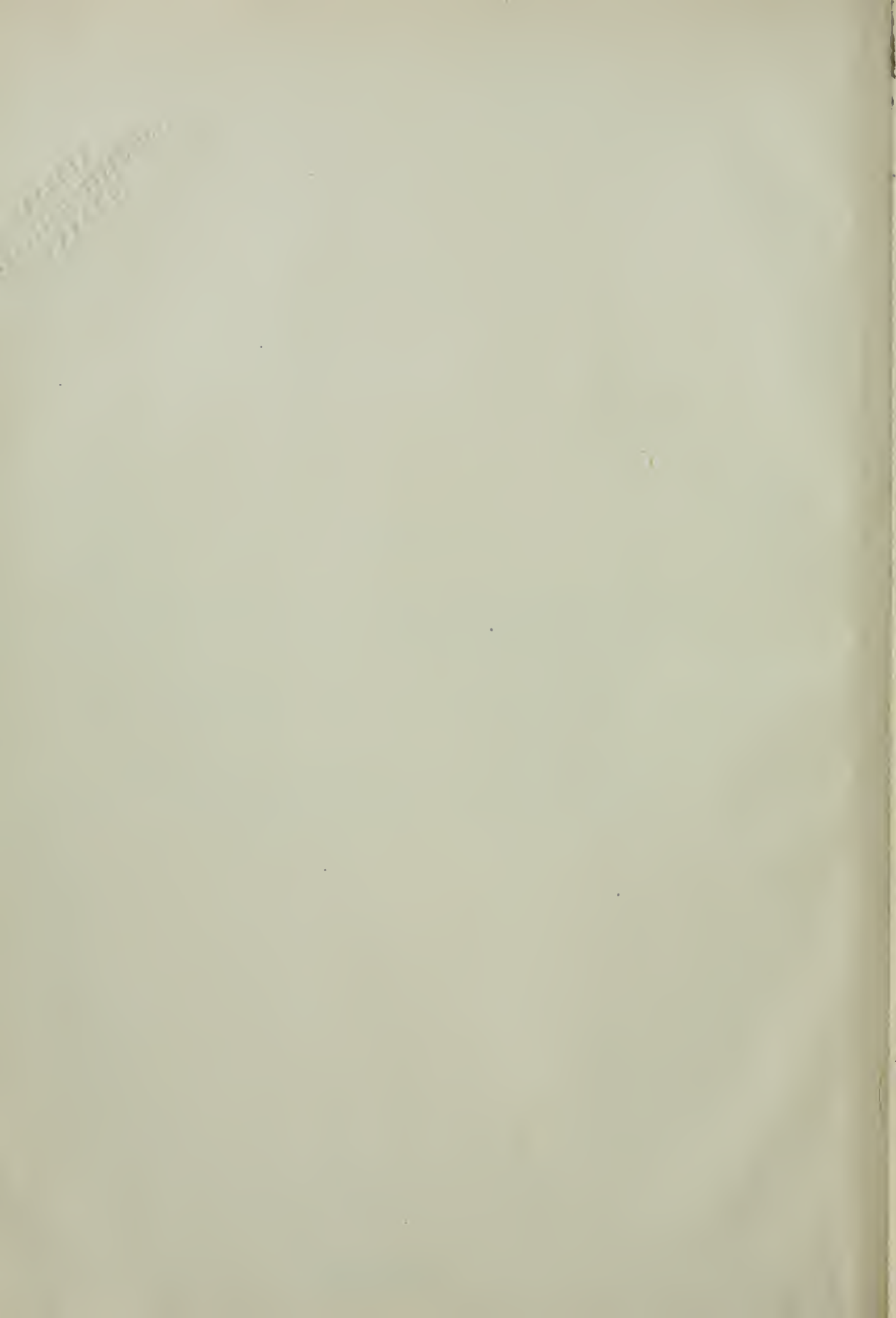
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IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
under the Act approved July 15, 1913, by agree-
ment dated August 3, 1914.

Chicago, Illinois, March 29, 1915.

Met pursuant to adjournment at 10:05 o'clock A. M.

Present: Arbitrators and parties as before.

The Chairman: Gentlemen, are you ready to proceed with the argument?

Mr. Carter: Yes.

The Chairman: Have you made any arrangement as to what time you are to occupy, or are you just simply going to conclude as early as possible?

Mr. Carter: Mr. Chairman, and gentlemen, I understood that it was tentatively agreed upon at the conference held in chambers, that our purpose would be to present the brief, and elucidate the different articles of the brief. I think that was the language used; and that being the fact, we should complete the presentation of our brief and the summing up of our case in two or three hours.

I understand that Mr. Sheean will have all the time he wants, so far as we are concerned, and then Mr. Stone will close the case for the Engineers, Firemen and Hostlers.

The Chairman: You may proceed with the argument.

OPENING ARGUMENT BY W. S. CARTER ON BEHALF OF
THE BROTHERHOOD OF LOCOMOTIVE ENGINEERS
AND THE BROTHERHOOD OF LOCOMOTIVE
FIREMEN AND ENGINEMEN.

Mr. Carter: Mr. Chairman and gentlemen: In the preparation of this brief we have availed ourselves of the opportunity to include therewith the condensed argument, and it will be our purpose not to elaborate upon that condensation unless it is desired by the Board.

Occasional comments will be made, but unless it is the desire of the Board to have the articles explained at length, or the argument exemplified, or citations read, we will go through it very briefly.

I think there have been about eight thousand pages of proceedings. I have not ventured to guess how many pages of exhibits there have been. To have attempted to sum up all that has been said, either as recorded in the proceedings of the hearings or as presented in the exhibits, would be a task that we did not care to undertake, and we did not believe that you cared to have us undertake it.

As I have stated, we have exerted ourselves to condense this immense amount of matter into as brief a space as possible. The citations are not complete. Many, many citations that perhaps should have been included, have been omitted; but it has been the purpose to make a few citations here and there, in order that it may be truly a brief.

If we should attempt to cite all that has been said by witnesses for the Engineers and Firemen, and the many exhibits, those citations alone would have taken more space than we have devoted to the entire matter.

The Engineers, Firemen and Hostlers respectfully submit that minimum rates of wages, rules guaranteeing the minimum compensatory benefits, and rules limiting the maximum hours of employment for a day's work, should be standardized, or made uniform on all Railroads participating in this Arbitration, for the reasons that:

In equity, Railroads should not be permitted to perpetuate discriminatory rates and rules that adversely affect the earnings and working conditions of Engineers, Firemen and Hostlers.

By the adoption of concerted actions of certain groups of

Railroads and their employes, and the abandonment of wage negotiations on the several Railroads, Engineers, Firemen and Hostlers have been deprived of other means of securing uniformity of wages and working conditions. This change in method of negotiating wage agreements became necessary; the railroads that had advanced beyond others in rates of wages asserting that no additional concessions would be made so long as competitors made less. Thus, Engineers and Firemen suffered loss because of their inability, without resort to strikes, to induce these competitors to be fair.

Henceforth if wages are to be standardized it must be through the joint action of the accredited representatives of the Railroads and of the Engineers, Firemen and Hostlers. If Arbitration is to supplant other methods of adjusting wage disputes arising between Railroads and their employees it will be incumbent on arbitration boards to standardize wages and rules, if wages and rules are to be standardized. The Congress of the United States having deemed it necessary to enact a Federal law providing for a method of avoiding conflicts between the Railroads and their employes which might result in the interruption of traffic, neither the Railroads nor the employes should bring about a condition that should materially affect the business of the country.

While this particular feature of the case has not been dwelt upon at length during the testimony or in the exhibits, the fact remains that all past wage negotiations, with the exception of those of 1907 and 1910, were the result of individual wage bargaining between the officials representing the different lines and the committees representing the different classes of employes on those lines.

In 1907, the first concerted wage movements of the Engineers and Firemen were undertaken. After prolonged negotiations, settlements were made with the Managers' Committee of Western Railroads and each organization. The Brotherhood of Locomotive Engineers were the first to undertake negotiation of a schedule for all engineers on these Western railroads. They were immediately followed by the Conductors and Trainmen, and after the settlement with the Conductors and Trainmen, the Firemen undertook a similar movement. Those movements, three in number but including four of the engine and

train organizations, were begun early in the fall of 1907, if I remember, and not completed I think, until April, 1908. At that time there was no effort to standardize. The settlements made were not at all in accordance with the intention of the men represented by the committees of employes; it was a compromise at best; there was no attempt to change the peculiar conditions found in the schedules of each railroad. In 1910, another wage movement was undertaken, the Firemen and Hostlers initiating the movement, or, rather, they began in 1909, and the negotiations were carried on during the winter of 1909-10, resulting in an arbitration in April and May of 1910. At that time there was no effort to standardize except on a few of the larger engines, as has been explained during the proceedings.

After the Firemen's Award, which was the only settlement by arbitration, the Engineers settled through mediation, under the Federal act. The Conductors and Trainmen reached a settlement without very much trouble after the Firemen and Engineers had reached a settlement.

What I have said here is to call attention to the fact that there never has been an opportunity of which the employes have ever attempted to take advantage to standardize wages, until the present negotiations resulting in the present arbitration, and we hope that the award will be a standardization of all the rules and rates.

When separate wage schedules were negotiated, the rates or wages and conditions of employment depended upon the liberality of the railroad, or upon the strength of bargaining power of the organization of employes.

If one railroad was operated under a policy that prompted recognition of the rights of its employes, that policy was reflected in the wage schedule. If those who directed the affairs of another railroad made no concession, that policy affected the wages paid. Thus, a disparity of wages began to develop.

As employes of the several railroads began to combine in organizations, another influence made itself felt. On railroads where the employes by force of numbers and aggressiveness secured wage increases and improved working conditions, a higher standard soon was established. On Railroads where employes did not possess or develop such influences, wages and working conditions lagged in progress.

It is now proposed that Arbitration do that which has been left undone by an absence of liberality of employer or strength of collective action of employees. We respectfully submit that all wages and rules be brought up to the standard set forth in the Proposition submitted for Arbitration.

The framers of the present Federal law, known as the Newlands Act, and the same may be said of those who advocated the enactment of its predecessor, the Erdman Act, say that by the creation of a method of adjusting these wage disputes that constantly arise between railroad companies and their employees, which would be satisfactory to both, that there will be no danger of the interruption of the traffic, either by a lock-out precipitated by the railroads, or a strike resorted to by the employees. We recognize that arbitrations are judgments, and that both sides will perhaps not secure that which they think is justly their due, but that is, I believe, the history of all litigation of every character. We do contend, however, that this Board of Arbitration should standardize wages and rules, and we submit in this Brief and Argument reasons why we believe our proposition should be the basis of the standardization.

Assuming that wrong exists where wages are now low and conditions less desirable, it is respectfully submitted that the wrong should be rectified by this Arbitration. No longer is the individual Railroad privileged, through a more liberal management, to increase wages or improve conditions regardless of how low those wages are or how undesirable those conditions may be. No longer may the Engineers, Firemen and Hostlers on a single Railroad, by their own initiative, force their wages and working conditions up to a level with others. It has been the contention of the Railroads that once an adjustment is made for a number of roads collectively, through a concerted wage movement, no wage increase should be granted by any Railroad except by the same method that fixed existing rates and rules.

I have in mind one especial case where the committee representing the Firemen and Hostlers, endeavored to secure an increase in wages on certain engines, claiming that the last arbitration or wage settlement was a flat increase on all engines, and that the rate that had been established on those engines previous to the last settlement, was very much lower than on other roads. The attitude of the officials of that road was that the present

wage schedules were the result of concerted action, and until another concerted action is resorted to, we will not increase the rates on any engines, even though they be much less than other roads are paying in the Western territory. I think we have brought that peculiar situation out during these proceedings.

For instance, we find that our proposition, if applied to some railroads, shows a very much greater percentage of increase than when applied to other railroads, and that is the direct result of the attitude of the railroads, that any changes or wage increases, or working rules that are compensatory in their nature, must be through a concerted action in the same manner as the last wage settlement was made.

Fortunately, there is no great diversity in wages and rules. Having regard for the exaggerated estimates of anticipated expense in past wage movements, it should be no great burden to the Railroads to standardize at the wage level fixed in the Proposition submitted for Arbitration, for it has not been the intent of the Engineers, Firemen and Hostlers, to interpret or to apply any proposed rule in a manner that will unjustly burden the Railroads.

It is the contention of the Engineers, Firemen and Hostlers, that their proposition, as they intend it to be applied, is equitable, is fair to both the railroads and the employees. They have protested, as you have noticed, against certain exaggerated applications of those propositions. As far back as some date in May, of 1914, a communication was addressed to the Chairman of the Managers' Committee, calling their attention that it was not the intention that the automatic release should apply to suburban service. We submit here, gentlemen, that that has been brought out in this arbitration, that by wrongful application or interpretation of our rules, a gross injustice is done, and assure you that that was not our intention, and we would not have you at any time base your decision for the award in its entirety upon what the witnesses for the railroads have been pleased to give you as their interpretation of how these rules will be applied.

The standardization of rates of wages and hours of employment, for like service, has been recognized as equitable and an economic necessity in many leading industries.

So long as one employe has been paid a lower rate of wages

than another employe in the same class of service and in the same competitive district, industrial unrest has been a marked feature of the history of organizations of labor. Particularly was this influence felt in the mining industry where formerly each mine was operated under a separate wage schedule, at which time strikes were constantly recurring at the mines where wages were low, solely for the purpose of securing as high a wage rate as was paid in some neighboring mine. Nothing has been so productive of content and industrial peace among coal miners, as the standardization of miners' wages.

And it is only necessary to refer to the fact that it was the Mine Owners' Association that demanded the standardization of the miners' wages, to prove conclusively, at least to our own opinion, that the standardization is proper, is equitable, and not detrimental to the employer.

Mine operators, master printers and employers in the building trades recognize the benefits of uniformity of wages and building conditions. Before the standardization of miners' wages in the same competitive field, the mine owner's business was extremely precarious, subject almost entirely to the ability of his neighbor to reduce the wages of employes. The mine owner who was most successful in decreasing the wage cost of his coal drove his more humane competitor from the field or else forced him to also reduce wage costs.

In the State of Illinois, up to the first settlement on which a standard rate of wages was paid, a considerable number of strikes were in effect at all times, and a vast majority of those strikes were the direct result of competition of the master miners, the owners of the mines. One mine owner would have a line of trade, established perhaps by good service, perhaps by aggressive soliciting, and he felt that he at least had a fixed market for his output. Some other miner, perhaps at the same distance from the same market, so that the freight charges would be the same, did not have the business. He knew that if he could market his coal slightly cheaper he could take the business from his competitor who thought at least that his business was permanent. The only way he could accomplish that purpose would be to reduce the wages of his miners, and a ten per cent or fifteen per cent reduction was posted in the mine. Now he felt at that time that it would be more profitable to have a strike, let his

mine remain closed until later importations of labor could be brought in, and then work at that low rate, and go to the patrons of the other mine owner and take his business from him; and that was the practice in the mining industry until the mine owners, through their associations, conceived the idea that the proper way of putting the mining business upon a proper basis was to standardize the wages.

A serious complaint of the master printers is that the International Typographical Union permits different wage scales in the same competitive district.

During the past twenty years, I have had a great deal to do with the publishing business. Many master printers are among my friends, and we have often discussed the wage policies of the International Typographical Union. The principal complaint that I have heard expressed by master printers against the International Typographical Union is that they do not standardize wages in the same competitive district.

For instance, we will take it in a town say like Peoria. They have a scale for Peoria, but they have a different scale for Bloomington, a different scale for Pekin, a different scale for Springfield; and the result is that the patron of the master printer in one city finds that he can send his printing to another city and get it done cheaper. Therefore I believe that if ever the master printers can organize after their foolish mistakes of three or four years ago, one of their first efforts will be to standardize wage scales in the same competitive district.

Nothing has been more satisfactory to the building contractor than the elimination of doubt as to what his competitor will pay for labor.

I think there is no question, gentlemen, but what the standardization of wages of building laborers in any city is of greater benefit to the master builders than it is to the employes, for this reason: In estimating upon the construction of buildings, unless there is a positive knowledge as to what the labor cost will be, there is a premium placed upon bids never intended to be carried. The master builder knows what his material will cost; but without a standardization of wages he does not know what his wages will cost; and I submit, gentlemen, that it is unfair to the Railroads in this Western country who have by their liberal policy paid what we call a higher rate, that they should be

placed in competition with Railroads that have refused to grant to their employes that which other railroads have been willing to grant.

The "saving clause" agreed to by the committees representing the Railroads and the Engineers, Firemen and Hostlers, which saving clause is made a part of the written agreement upon which this Arbitration is based, is not prejudicial to uniformity of minimum rates of wages and rules of employment, as set forth in the proposition here arbitrated.

The saving clause is found in the Agreement to Arbitrate which is published in the first day's proceedings.

In their efforts to secure a standardization of wages and working conditions of Locomotive Engineers and Firemen on these Western Railroads they have not attempted to secure a standard rate higher than already in effect, except for certain large locomotives for which no commensurate wage has been secured since their introduction. Engineers and Firemen believe if they, at this time, secure that which they have asked they could not be accused of making radical demands, but, having made a conservative wage request, they were compelled to protect those who were receiving higher wages than requested, and those who were working under more favorable rules than requested, by insisting that such higher wages or better rules be maintained.

This so-called "saving clause" that is a part of the Arbitration Agreement, is, of itself, proof that the request is conservative.

When committees of employes abandon the theory of the so-called "saving clause," they should make requests far in advance of any wage or rule already in effect; and then, if there be compromise, they would not sacrifice the conditions of men on roads where the policy of the management of such roads had been liberal.

This saving clause is essential, and made so by the ability of the railroads in past Arbitrations to convince Arbitration Boards that wage requests, if granted, would financially embarrass Railroads. This saving clause saves railway employes from awards made under such influence.

Had it not been for the saving clause in one arbitration with which I was connected, the rigid estimate of expenses which deceived the neutral arbitrator would have resulted in an award

that would have made great reductions in wages. When a neutral arbitrator is assured that if a certain thing is allowed it will bankrupt his railroad, and having conveyed that impression and secured an award under such an impression, the saving clause is necessary on his railroad to avoid a wage reduction, and that has been proved by our experience. Where the claim has been made that if a certain award is rendered it will bankrupt his railroad, if it had not been for the saving clause allowed by that same Arbitration Award on his railroad, and so agreed and confessed by the employes on that railroad.

Therefore, gentlemen, at any time, the saving clause is essential for the protection of those men who have succeeded in advancing their wages and working conditions, either through the force of collective bargaining or because of the liberal policy of the managerial officers of that railroad.

In the fixing of wage scales in other industries it is only the minimum rate of wages that is standardized, thus recognizing the equity of exceptional higher rates, and in fixing the basis of a day's work it is only the maximum period of time that is standardized, thus recognizing the equity of exceptional shorter periods of service for which a day's wage may be paid.

To prohibit the payment of a higher rate than fixed as a standard would prevent a liberal employer from sharing his profits with his employes, as has been done recently in the automobile industry.

In many industries where a minimum wage rate is a part of wage agreements, some employers insist on paying a higher rate, as is the practice in the printing trades.

There is not a city of which I have knowledge that some master printers do not insist on paying higher than the scale. They contend that the scale has been made for the employe, but he is going to fix his own wage rate above that scale; and in every city you will find the liberal and most progressive master printers do pay higher than the scale.

The uniformity of rates and rules affecting the compensation of Engineers, Firemen and Hostlers should not be avoided by the relative wealth of railroad corporations.

In no other industry does the increased wealth of the employer find itself reflected in the wages of his employe; in fact,

the most powerful and wealthy corporations usually pay the lowest wage.

The rate of wages paid by building contractors, master printers and other employers is in no way affected by the amount of property on which they pay taxes.

The profits on the labors of Engineers, Firemen and Hostlers are as great on railroads whose funds have been dissipated as on railroads that have accumulated vast surpluses.

A review of the testimony and documentary evidence presented at this arbitration will show, in many instances, that the railroads that are most prosperous are not the roads that pay the highest wage, or have the most desirable working conditions for engineers and firemen. In fact, it can be shown in some instances to the contrary, that the railroads whose business for the year 1914 was perhaps better than the business of any other railroad, are paying a lower wage rate to engineers and firemen than are the roads whose business was most affected by the depression of 1914.

I want to confess, however, there is no rule to it. It may be that the two roads on which wages are lowest may include the most prosperous road and by the side of it may be the road that lacks most in prosperity; and you may find two of the roads that pay the highest rates of wages that are not at all related in their degree of wealth and prosperity. It has been the ability, on the one hand, of the employe to get improvements, and the ability, on the other hand, of the employer to prevent progress.

In past practice it has not been the most opulent of the railroad corporations that have paid the highest rates of wages to their employes.

Loss of traffic by railroads first affects the earnings of engineers, firemen and other employes engaged in the operation of trains. Seasonal fluctuations in the amount of freight transported by a railroad results in greater loss to engineers and firemen than to the railroad by which they are employed. The loss of earning power of the railroads by the recent depression in business is proportionately not so serious as the loss sustained by engineers and firemen resulting from the same cause. Railroads pay wages to engineers and firemen in freight service only when freight is moved; therefore, with every depression in the business of a railroad there is a decrease in expense to the rail-

road, and a loss of earnings by the engineers and firemen. With proper conservation of railway revenue, a railroad should be as able to increase wages of engineers and firemen in 1915 as in 1913.

If employers in other industries made it a point never to have a bank balance and to steadily increase the mortgage upon their property, I doubt whether such actions or policies of employers in other industries could be seriously advanced as reasons why the employes should not have wage advances. If such a policy is to be taken as good reason why wage advances should not be made, then no railroad should have a dollar; it should immediately disburse all of its surplus money among its stockholders, or else it should issue another block of bonds or stocks that would take up these surpluses. The fact that the railroads in 1913 were able to expend all of their great revenue, net revenue I mean, from that year, before we reach an arbitration award in 1914, should not be taken into consideration in the making of an award for the year 1914. If these huge wage movements are adjusted amicably through arbitration and under a Federal law, it must take from one to two years to reach a conclusion. These wage movements may be begun when railroad business is at its height, and it may be that when the time comes for the rendering of an award one or two years later, railway traffic may be at a low stage. If railroads are to take advantage of that, it would make it impossible for the officers and committees of these Organizations to curb the man on the engine. We were told in the beginning of this movement, if we did not strike, there would be a change in traffic before an arbitration could render an award. And if what they told us is true, I fear they will never give us consent again to prolong the agony for two years before an award is reached.

The Federal courts have held that inability to pay dividends on stocks and interest on bonds, or the necessity for issuance of receiver's certificates to defray expenses of operation, are no cause for deviation from uniformity of rates of wages paid railway employes.

The Federal Act under which this Arbitration is held guarantees special consideration to employes of bankrupt railroads in charge of receivers appointed by the Federal courts.

In Exhibit 9, the railroads show in numbers and by diagram

the freight density, or ton miles per mile of line, for all the railroads participating in this Arbitration. Presumably the railroads contend that with increase in freight density, the ability of railroads to pay higher wages is made greater. It appears, from Exhibit 9 of the railroads, that under this theory the railroads most able to pay high wages actually pay less wages to engineers and firemen.

Why, the Wabash and Illinois Central head the list in freight density, and pay the lowest wage. Therefore, the theory of freight density has not been applied practically in wage matters in this Western country.

The Railroads now seek, and profit by uniformity of National legislation affecting their financial management and physical operation and oppose variant State legislation affecting the same matters, and are privileged to purchase materials for construction, maintenance and operation in a market where prices are uniform.

Committees representing Railroads in legislative matters have favored National laws supplanting State laws because of the lack of uniformity of the latter.

A Federal Act prevents discrimination in freight and passenger rates, and requires uniformity.

And right there, is it fair that the government should say to two Railroads, perhaps competing companies, "The rates between two certain points shall be the same," when those Railroads having taken advantage of past opportunity are unequal in their labor costs? One Railroad, by a liberal policy perhaps pays 10 per cent more wages on an engine of a certain weight on drivers than its competitor. And yet that Railroad that pays the highest wages must collect the same rates between two given points, as fixed by the Interstate Commerce Commission.

The Interstate Commerce Commission requires of one Railroad only that which is required of all Railroads.

The Federal Safety Appliance Laws apply to all Railroads in like manner.

The institution of uniform rates and rules will make impracticable the distortion of existing facts and the exaggeration of anticipated expense of a proposed wage increase, which has, in past practice, partially defeated the true purpose of the Federal Arbitration Acts.

In Arbitrations, the employes are unable to disprove the statistical information prepared and presented by the Railroads because they are denied access to the Railroads' pay rolls. The men know, from experience, that they are longer in going over a division with a modern, heavy train than formerly; they know from experience that a far greater amount of coal is being burned; they know many things from experience that the Railroads seek to disprove by the compilation of an appalling array of figures that cannot be verified or impeached. It is only when railway officials become confidential with each other in their technical discussions that employes find comfort in their statements, and are enabled thereby to quote their sincere opinions.

Within the past two years we have been confronted with a threatened strike of Locomotive Firemen and Hostlers in the Eastern States for the purpose of compelling Railroads to arbitrate wage disputes under the Federal Law. This change of sentiment is the direct result of an apparent determination on the part of certain Railroads in the past to wrongfully interpret Arbitration Awards, and the apparent ability of the Railroads in the past to overwhelm an Arbitration Board with a mass of statistical evidence, much of which is based upon exaggerated, if not grossly inaccurate reports prepared by obscure clerks of these same Railroads, clerks not under oath, and entirely unknown to any member of the Arbitration Board.

The valuation of the property of Railroads, appraised by themselves for purposes of taxation, is seldom given serious consideration, and we ask that this Board of Arbitration give only the same consideration to the estimates made by the Railroads in their Exhibits as to the cost of this Proposition.

It is well known by all railway operating officials that much of the cost of what is termed "arbitrary" rules may be and has been avoided by removing the cause of complaint. In securing information for the preparation of these estimates, specific instructions were given the Railroads not to assume that changes will be made in the service in order to meet different conditions. Thus, over \$321,000 is estimated in Railroads' Exhibit No. 3 to be the increased expense of the Terminal Delay, for only one month, when most terminal delay would be avoided by the proper attention to the calling of engine crews and by moving engines to the proper place of delivery at end of trip. The em-

ployment of Hostlers would, in nearly every case, avoid all terminal delay to Engineers and Firemen, except when departure of trains are delayed, yet we find the expense of Hostlers and terminal delay both included in the Railroads' Exhibits, thus, to a great extent, duplicating estimates of expenses.

It is believed, gentlemen, that once we secure a standardization of wages on a fixed basis, and a standardization of compensatory rules, boards of arbitration who come hereafter will not require the thousands of pages of testimony and as many pages of exhibits to inform them as to what a certain proposition will cost the Railroads. Once standardize the rates and rules and an arbitration board can decide for itself what a request will cost the Companies and save perhaps months of time in hearings.

Now it has not been our purpose to cite many of the principal points of the testimony of witnesses, or that which has been introduced in exhibits. Following this part of the Brief and Argument you will find a comparatively few citations. I desire specially to call attention to the first citation, where Mr. Park, Vice President of the Illinois Central Railway said:

"The Railroads are standardizing track, bridges, block signalling, equipment, rules and practices. Why should they not standardize wages and discipline just as the Government would do if it owned and operated the Railroads."

I want to quote from the decision in the case of "Oliver Ames et al. versus Union Pacific Railroad Company et al."—Eighth Judicial Circuit and District Court of Nebraska.

"In the opinion of the Court the allowances made by the schedules now in force are just and equitable, when all the conditions are considered. The employes, under the present system, share the burdens of diminished business. They make less mileage and get less pay per month. The rate now paid is not higher than the rate paid on other lines operated through similar country and under like conditions, and, in the opinion of the Court, is not higher than it should be for the service rendered."

The Receivers of the Union Pacific Railroad, during a very depressed condition of business, feeling that the interests of the owners of the property required a reduction in the wages of the employes, arbitrarily reduced the wages of Engineers and Firemen and other employes of the Union Pacific Railroad. The

financial condition of the country at that time was very bad. It was because of the bad financial condition of the country that the Receivers of the property said that they had the right to reduce the wages. No doubt the Receivers realized that because of the fact that thousands of men were out of employment, that if the men whose wages were reduced resorted to a strike, the Receivers would not find much difficulty in securing men to take their places. But now when this matter was brought to the Court, the Court in whose hands this receivership was held, decided that the wages should not be reduced; that during these periods of depression the wages of the Engineers and Firemen were reduced by the very fact of decrease in business, and it did not require an additional decrease of a percentage of the wages.

Now, with regard to this estimate. I want to read from a note that appears on Railroads' Exhibit No. 2, sheet 1, form 30. Now, this is a caution to the Railroads when they are asking for information on which to base their estimate of expense.

"The proposed wages should in every case be figured upon the units of performance for October, 1913. It should not be assumed that changes would have been made in the service in order to meet different supposed conditions."

There are the instructions in themselves which, if carried out by the Railroads after the Award, would be an unprecedented act on the part of railway officials. After every wage settlement, I may say, of every organization in all these past years, as soon as a wage schedule has been perfected which brings any changes, the Railroads immediately set about to change the operation of the property to offset the wage increase as much as possible. And, notwithstanding the fact of the supposed increase, we recognize that when the Award is made that they are not going to carry out the policy so strenuously advocated by the witnesses in this case. We recognize that they are going to do all that they can legitimately—and I won't say what else—to avoid the expense of this Arbitration, and I am going to say that in many instances they will do it legitimately, do it properly, and offset much of the expense of the Arbitration.

Now, gentlemen, all of that time has been devoted to what? To try and secure through an Arbitration that which Railroad officials want and demand. A peculiar feature of wage bargaining, particularly railway wage bargaining, is this on their part,

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“Never make a concession though it may be an advantage to the Railroad.” Therefore, we have devoted all this time, all of this effort to secure a standardization, and yet it is known among the Railroad officials themselves that nothing could be better for the Railroads than a standardization. They know that there is a continual harassing, that is their term, that is what they call it, because of the fact that on every Railroad the wages are not quite so high as on some other Railroad. The old complaint of the individual railway manager or railway official negotiating rate schedules, to the other official is, “Why did you change that rule? You are going to force me to do it now.” Why, we must confess that that is true. And when a liberal operating officer grants a higher rate to his Engineers and Firemen, it certainly results in Engineers and Firemen on every other road where the rate is lower becoming aggressive, and insisting that that rate be paid them.

I believe from a railroad operating standpoint that nothing would so greatly benefit the railroads as a standardization of rates and rules. Because then I believe the men would be more content, would be willing to go longer between wage movements. It is the knowledge on their part that some other road is more liberal than their employer that causes a great deal of this unrest and dissention.

It is now my purpose to present the Proposition submitted for Arbitration in detail, and would advance briefly argument why we believe each request should be awarded by this Board of Arbitration.

The Engineers, Firemen and Hostlers assert that the Proposition now being arbitrated is equitable and should be awarded, and in support thereof submit the following presentation of each Article of the Proposition.

Article 1 has to do with the basis of a Day's Work.

The Article is as follows:

“One Hundred miles or less, five hours or less, will constitute a day's work in all classes of passenger service. All mileage in excess of 100 miles shall be paid for pro rata.

One hundred miles or less, 10 hours or less, will constitute a day's work in all classes of service except passenger and switching service. All mileage in excess of 100 miles shall be

paid for pro rata. Ten miles run will be equivalent of one hour's service performed, or vice versa."

It is contended that the foregoing rule should be awarded because—

The high speed of passenger trains and the nervous and physical strain incidental thereto makes the five-hour day equitable in Passenger Service.

As the speed of a train increases, the responsibility for observation of signals increases.

As the speed of a train increases, the amount of coal consumed per hour increases.

Passenger trains with but few exceptions are scheduled to complete a trip of 100 miles in less than five hours.

While the seniority rules promulgated, created and proposed by Engineers and Firemen, and carefully fostered by Railroad officials provide that the oldest Engineer shall run the passenger engine, if there were not a single principle of seniority included in a single schedule, you would find that railroad officials who had no friends to favor would take the oldest Engineers to operate their passenger engines.

The Chairman: Mr. Carter, what is the average length of a passenger run?

Mr. Carter: I don't think that could be answered. In the old days passenger runs were about the same as freight runs. When I fired an engine, the terminals for the passenger trains were the same as for freight trains, but the practice has changed. Now it is customary on some divisions to run one passenger engine across two freight divisions.

The Chairman: Well, what distance is an Engineer, as a general rule, required to run now in the passenger service, in a day's work as now constituted?

Mr. Carter: I could not say, Mr. Chairman. I would say that it is a much greater distance than the freight runs.

Mr. Sheean: If you do not mind my calling attention to that, Mr. Carter, I will say that sheet No. 5, of our Exhibit No. 29, shows that Engineers entirely in passenger service averaged 166 miles per day.

Mr. Carter: Have you there what the freight men averaged?

Mr. Sheean: The Engineers entirely in through regular freight service averaged 120.7 miles.

Mr. Carter: That shows that the passenger men are running farther than the freight men. But aside from that, the Engineer and Fireman on a high speed passenger engine are subjected to conditions that should make a five hour day long enough for them to work.

Mr. Burgess: Pardon me, Mr. Carter, for interrupting. If the Engineer was on a run, based on the average miles as shown by the Railroads' Exhibit, his day would then be what? 166 miles, I think I understood you to say.

Mr. Sheean: Yes.

Mr. Burgess: He would not get any more time then?

Mr. Carter: It would have to be under the old ten hour rule in effect on some roads.

Mr. Burgess: I am speaking of the twenty mile rule.

Mr. Carter: What distance did you say?

Mr. Burgess: 166.

Mr. Carter: He would have five hours for the first 100 miles, and two-thirds of five hours for the 66 miles, which would be $7\frac{2}{3}$ hours before his overtime would begin.

Mr. Stone: Eight hours and 18 minutes.

Mr. Burgess: Before overtime would accrue on that run he would have to be eight hours on it, would he not?

Mr. Carter: I think so. I have no pencil here.

Mr. Burgess: For 166 miles, that could be calculated.

Mr. Carter: Let us make it 200 miles. I can figure in hundreds more easily.

Mr. Burgess: All right.

Mr. Carter: He would have to be ten hours on the road before overtime would begin, even under the five hour day.

The Chairman: That is what I wanted to know. I wanted to get an idea about it.

Mr. Carter: The rates for engineers and firemen are less per day and per hundred miles in passenger service than in other road service.

Much of the time required of engineers and firemen in passenger service is in addition to the time included in this rule.

The five hour day for passenger service is already in effect on a vast majority of the railroads in the United States and

Canada, and many of the railroads participating in this Arbitration have such a rule, which should now be made the standard rule.

You should not overlook the fact that in fixing the wage of passenger engineers and firemen, consideration was given to the speed of the train and perhaps the length of the run.

Before the length of the run, or number of miles in a given time can be properly criticised in any comparison with freight service, the rate of wages per mile and per hour should be the same in passenger service as in freight service. It is believed that this lower rate on the same engine for both the engineer and fireman in passenger service, should and does give them special consideration in what constitutes a day's work.

When engineers and firemen employed in passenger service are required to exceed 100 miles in one trip, the rate per mile for additional miles should not be less than the regular rate.

Without attempting to refer to the citations, I desire to call attention to the testimony of witness Robertson, on page 7219 of the proceedings, wherein he states that the five hour day with overtime twenty miles per hour, minute basis, is the standard on the Eastern Railroads.

I desire also to call attention to the exhibit presented by Railroad witness Bremerman, on pages 3027 and 3028, wherein the five hour day for passenger service is stated to be in effect on a number of railroads participating in this Arbitration.

I also desire to call attention to the testimony of Employes' witness Cadle on pages 51 and 52.

In fact, the five hour day and twenty mile basis is now in effect on most of the railroads. It is true, there is a difference in the rate of the overtime herein requested, but as to when the overtime shall begin, or when the day's work is completed, a vast majority of the railroads have now in effect that which we now request.

The Chairman: Then we understand this rate prevails in the Eastern Territory?

Mr. Carter: Not the rate.

The Chairman: The rule, I mean.

Mr. Carter: But the rule; that is, a five hour day computed on the basis of twenty miles per hour.

The Chairman: What is the rule in the Southern Territory?

Mr. Carter: It varies. They have a five hour day in Passenger service, I think, on most of them. I will have to refer to the exhibit.

The Chairman: Do my questions bother you in your presentation?

Mr. Carter: Go right ahead, Mr. Chairman: I will say, in reply to that, the last exhibit presented by Witness DeGuire, shows what the day is on the different roads; that is, according to my recollection; and then again, I think the witness Bremerman, of the Railroads, showed that in his exhibit No. 1.

The request for a ten hour day in freight service is conservative, in that practically all railroads have as favorable, or a more favorable rule.

Many of the railroads participating in this Arbitration now have in effect a rule or practice that 100 miles or less, 10 hours or less is a day's work in all services except passenger service.

As evidence of the conservatism of this request, reference is here made to the many railroads that have already adopted the eight hour day.

I want to call attention to an error in the brief on page 10. The word "conservation" should be "conservatism," "as evidence of the conservatism of this request." Some people's writing cannot be read, even by a printer.

If, on any railroad, more than ten hours is required in any service for a day's work, such practice should be abandoned.

The clause in this rule providing that all mileage in excess of 100 miles shall be paid for pro rata, relieves railroads from paying the overtime rate where the speed of the train is equal to or exceeds ten miles per hour, thus establishing for railroads a more favorable rule than in other industries, where the overtime rate arbitrarily begins at the end of the day.

Ten miles' run in freight service should be the equivalent of one hour's service performed, or vice versa.

When the railroads established the mileage basis, agreeing to pay a day's wages for 100 miles or less, 10 hours or less, a bonus or premium system was instituted, which should be maintained so long as the mileage basis of wages is preserved. The theory of the railroads was that a full day's compensation paid

an engineer or fireman for taking a freight train 100 miles in less than ten hours, was a premium on efficiency and industry.

The mileage basis of paying, in freight service, for 100 miles or less, or 10 hours or less, a day's pay, was the bonus system or premium system, created long, long before certain scientific gentlemen created the term—before Mr. Taylor, perhaps, was born, unless he is quite an old man.

Mr. Stone: He died last week.

Mr. Carter: Well, I guess he must have been old or he would not have died. The railroads said to the man, "We will give you a day's pay for taking this train 100 miles. Now, as a premium or bonus, if you take it in less than ten hours, we will not deduct anything from your pay." Their theory was that the fireman would bend his back just that much harder, the engineer would do his utmost to get the train over the road, and the brakemen and conductor would contribute their share to the expeditious movement of that train. After having accomplished that purpose, they now propose that they take the bonus or premium back. It is like the story of the Indian. He will give you everything he has got, when you come to his tepee, but when you leave you had better not take anything with you. They gave us this bonus and now they want to take it back.

Witness Bremerman, on page 3034-5, said, that many railroads participating in this Arbitration have this or a more favorable rule already in effect. Until such time as the mileage basis of compensating engineers and firemen is abandoned, and the eight hour day with time and a half for overtime is substituted therefor, the old rule that ten miles should be equivalent to one hour, or vice versa, should be maintained.

If the railroads believe that they can no longer afford to pay the premium or bonus on doing 100 miles work in less than ten hours, or five hours, or whatever it may be, whatever the day is, eight hours on some roads in freight service, then they should come out and say, "Here, the time has come for us to abandon the old antiquated mileage system. We propose to pay you by the hour hereafter. We propose to give you an eight hour day, and we propose to pay you a wage per hour for an eight hour day, commensurate with the responsibilities and labor of your service, and in keeping with the wages per hour in other lines of employment. And we will go further; we propose to

pay you time and one-half for overtime for every minute you work over the eight hours. In return, we ask you to give us eight hours work for eight hours pay."

When they make that proposition, while I am not in a position to speak for the men, I know it will benefit the men greatly, and I truly believe they will accept it.

Also, a part of Article No. 1 is Overtime in Road Service.

The rule is "Overtime in Passenger Service will be computed and paid for on a basis of twenty miles per hour, at rate for each class of engine used.

"Overtime in all other service except Passenger and Switching service, will be computed on a basis of ten miles per hour and paid for at the rate of fifteen miles per hour, at rate for each class of engine used. All overtime will be computed on the minute basis."

The only change from present practice on many roads in that rule is that when you pay for overtime on the basis of fifteen miles an hour, it is actually paying overtime at the rate of time and one-half after ten hours per 100 miles.

It is contended that the foregoing rule should be awarded because:

(1) The rate for overtime in passenger service should be at least as high as the rate for regular hours worked. The basis of a day's work in passenger service being 100 miles or less, five hours or less, on a majority of the railroads, a speed basis of twenty miles per hour, the rate per hour is one-fifth of a day's pay, which, at least, should be the rate for all overtime hours worked in passenger service.

Under the present conditions, where a five hour day is in effect, if an engineer or fireman is required to expend five hours in going 100 miles, their rate per hour is one-fifth of the day's pay; but under the present practice, if, through no fault of their own, they are required to go six hours in making that 100 miles, the railroads have demanded that they work for about half in the sixth hour what they have been willing to pay them for the first five hours. We contend that that is a departure from past practice. We contend if it is worth one-fifth of a day's pay an hour, to work five hours going 100 miles, and overtime begins after the fifth hour, that the same rate should be paid for the sixth, the seventh and the eighth hour as was paid for the first

five hours, no more, no less. It is not time and one-half for overtime, it is straight time, but the Western Railroads contend it should be half time, some of them. The Southeastern roads do not. They have special rates for overtime, which is not time and one-half, but much more than straight time, as will be noted by referring to Exhibit 83.

Railroads that now pay a lower rate for overtime than for the regular hours of service, should be required to pay at least the same rate.

The rate for overtime in freight service should be at the rate of fifteen miles per hour, on a speed basis of ten miles per hour.

Now, I said a while ago that is asking for time and one-half after ten hours. It is not. I will explain the difference between the overtime paid by employers in other industries and what we are asking for in this industry. When the speed of a freight train averages less than ten miles per hour and requires engineers to work more than ten hours to the 100 miles, overtime should be paid at the rate of time and one-half. The rule is more elastic and less expensive to the railroads than the overtime rule is to employers in other industries, where the overtime rate begins at the expiration of eight hours, without regard to anything else. In other industries, as soon as the eight hours are up, the overtime rate at time and one-half begins. We do not ask that, not even for a ten hour day. The rule here requested relieves the railroads from paying any overtime so long as the average speed of the freight train between terminals equals or exceeds ten miles per hour, and in any event road overtime rates do not begin until the expiration of ten hours.

I presume that the members of the Board have that clearly in their minds, but it is a most complicated problem. When a brick layer or a printer says that his overtime is time and one-half, it means that at the end of eight hours, after that every minute that he works he gets time and one-half pay for it. When a machinist employed by these western railroads works his day, the moment he is required to work longer, his time begins to run at time and one-half; but in this proposition we are not asking that. We are asking only that when the speed of the train falls below ten miles per hour shall this time and one-half rate apply. For instance, it may be 150 miles from A to B. The man may be

ten hours on the road. He may be twelve hours on the road. He may be thirteen hours on the road. He may be fourteen hours on the road. He may be fifteen hours on the road, but this rate of time and one-half does not begin. It is only when he exceeds fifteen hours in making the 150 miles that we ask that this rate of time and one-half begin. So, you see, this rule is far more liberal than the time and one-half overtime rule is to the employers in any other industry.

I fear that unless this is thoroughly explained at this time, it may be believed that we are asking the railroads to do as much as other employers do, and I assure you we are not asking that.

It is unquestionably shown by evidence submitted and statements of prominent railway officials that the heavy loading of freight trains is the direct cause of decrease in speed.

When a freight train is overloaded, the sole purpose is to increase the earnings of the railroads from that train, and this purpose is accomplished usually, by exacting longer service and more arduous service from the engineer and fireman.

The overloading of freight trains, resulting in reduced speed, longer periods of employment and additional labors of the engineers and firemen, brings to the railroads increased earnings and makes it profitable for railroads to adopt this rule, and it is unjust for them to oppose it.

It is hardly conceivable that a freight train would make less than ten miles an hour if given an opportunity. I do not know of an engineer, fireman, conductor or brakeman on a freight train who, taking into consideration the usual congestion of traffic, unless there be some accident, cannot get over the road on a basis of ten miles per hour. That was the practice in the old days; but today, with the heavy loading of trains, in order to secure as much revenue from one train as possible, these trains cannot get over the road at a speed of ten miles per hour. We do not deny the railroads the right to do what they are doing. If they can double their income, let them do it; but having doubled their income, we feel that when they require the engineer and fireman to be on the road more than one hour to make ten miles, or more than fifteen hours to make 150 miles, they should be willing to divide some of that result of that additional burden with the engineer and fireman, and pay them time and one-half.

Railroads' Witness Trenholm says on page 5588:

"It would stimulate, no doubt, every operating officer, possibly, to a higher degree than he is now stimulated, if that be possible, to avoid overtime paid for on the basis of time and one-half."

We will not even contend that. We believe the officers could not be stimulated to do that under the present policy, which is to load a train down as long as the wheels will turn. The only way to stimulate it would be to do, as has been pointed out by other officers, which is to take off some of the cars, and that would stimulate the speed. But they will never do that. They would rather pay the time and a half.

The minute basis of paying for overtime in all classes of locomotive service, is equitable.

Where the thirty minute basis is enforced, an injustice is done, when engineers and firemen receive no compensation for twenty-nine minutes of overtime. Where railroads are required to pay a full hour's overtime for thirty-one minutes, it is not fair to them. The minute basis is exact and fair to both employer and employe.

The minute basis has been adopted on many railroads, and should now be made uniform on all western railroads.

I presume it would not require additional argument to show why the minute basis is a proper basis both from the viewpoint of the railroads and of the employes. Here is what has been said in the past by committees who sought the minute basis, and by officials who granted the minute basis. A train approaches a terminal. The yardmaster has some cars on the track that this train must use in order to get into the terminal. The yardmaster looks at his watch and finds he can hold that train out there for twenty minutes more without paying the crew anything, and he does it. The result is that under the thirty minute basis, while there is really no occasion to detain the train crew, they will be detained, because it does not cost anything.

Now, the railroad officials have come back and said "Yes, and when you find you are getting almost into the yard, and you look at your watch and find you will have to be delayed only two minutes more to get an hour's pay for it, why, you will come in slower." And that, it is true, is an abuse on both sides. That arose under the old thirty minute basis. They could delay

the men in the terminal without cost to the railroads. And under the thirty minute basis, if the railroad employes wanted to be unfair to the railroad company, they were inspired to be just three minutes longer out, and so would get an hour's pay. Under the minute basis now in effect on many railroads, all the cause for unfair dealing on both sides has been eliminated.

Now, under Article 2, we have the rates of pay, and without reading them in their entirety, I wish to ask the privilege of having this portion of the article included in the proceedings, to which I shall address myself.

The Chairman: Incorporated as a part of your speech?

Mr. Carter: Yes, without reading it.

The Chairman: That may be done.

(The rates of pay are as follows):

“The rate in passenger service on locomotives other than the Mallet type weighing less than:

	Engineers	Firemen
“80,000 lbs. on drivers shall be.....	\$4.50	\$2.90
“80,000 lbs. and less than 100,000 lbs. on drivers.	4.60	3.00
“100,000 lbs. and less than 140,000 lbs. on drivers	4.80	3.15
“140,000 lbs. and less than 170,000 lbs. on drivers	5.00	3.25
“170,000 lbs. and less than 200,000 lbs. on drivers	5.15	3.40
“200,000 lbs. and less than 225,000 lbs. on drivers	5.35	3.50
“225,000 lbs. and less than 250,000 lbs. on drivers	5.50	3.65
“250,000 lbs. and over on drivers.....	5.60	3.75

“In all classes of service except passenger and switching service on locomotives other than Mallet type weighing less than:

	Engineers	Firemen
“80,000 lbs. on drivers shall be.....	\$5.00	\$3.25
“80,000 lbs. and less than 100,000 lbs. on drivers.	5.20	3.40
“100,000 lbs. and less than 140,000 lbs. on drivers	5.40	3.50
“140,000 lbs. and less than 170,000 lbs. on drivers	5.60	3.65
“170,000 lbs. and less than 200,000 lbs. on drivers	5.80	3.75
“200,000 lbs. and less than 225,000 lbs. on drivers	6.10	4.00
“225,000 lbs. and less than 250,000 lbs. on drivers	6.40	4.25
“250,000 lbs. and over on drivers.....	6.70	4.50

“Mallet type engines, all classes of service, except switching service, weighing less than:

	Engineers	Firemen
"250,000 lbs on drivers.....	\$7.50	\$4.90
"250,000 lbs. and less than 300,000 lbs. on drivers	7.75	5.10
"300,000 lbs. and less than 400,000 lbs. on drivers	8.00	5.25
"400,000 lbs. and over on drivers.....	8.25	5.50"

Mr. Carter: It is contended that the foregoing rates of wages should be awarded and be based on weights on drivers of locomotives because:

Weight on drivers is the most practical and preferable basis for standardization of wages of engineers and firemen.

It is the basis of wages that partially compensates engineers and firemen for their increased productive efficiency, for as the size and power of the engine increases, so does the tonnage of the trains transported increase, and also do the revenues to the railroads increase.

It is the basis of wages that partially compensates engineers and firemen for increased labors and responsibilities resulting from larger engines and heavier trains. It is the basis of wages that partially compensates railroads for loss of earnings on unimportant runs, where the smaller locomotives are generally used.

I mean by this, that under this basis of wage payments, if there is an unimportant run, where the tonnage is not excessive, the railroads are permitted to put on that run an engine of reduced weight, and pay a very much lower rate.

It is the basis of wages for firemen once demanded by the railroads now participating in this arbitration.

It is the basis of wages for engineers demanded by the railroads in the Eastern territory.

It is the basis of wages for firemen proposed by the railroads in the Eastern territory.

It is more difficult for railroads to obviate the effects of wage increases by changing weights on drivers than by reducing the size of cylinders, as in the past.

If wages are to be standardized, some one basis must be selected, and no basis is more equitable to the railroads and their engineers and firemen, than weight on drivers.

I do not like to read citations. I hope you will pardon me for referring to just a few. I want to quote from Mr. W. C. Nixon again. Mr. Nixon was Chairman of the Western Confer-

ence Committee of Managers that negotiated with their firemen and hostlers the last wage movement, that of 1910. Mr. Nixon says:

“The Proposition of the Managers’ Committee as to the first of these two problems is that tractive power is the only sound method for determining Firemen’s rates, and that weight on drivers is the simplest and best method of determining tractive power.”

While no objection was made to the flat increase requested by the firemen and hostlers previous to the arbitration, when a similar basis was determined upon and was awarded, then it was discovered by the Managers’ Committee that many orders already placed with locomotive builders would work a hardship upon these railroads. At that time there were no small engines equipped with superheaters, and I do not think during the whole negotiations that led up to the Arbitration of 1910, the question of superheaters was discussed. It was overlooked by both sides. In the first place, we did not know the superheaters were coming. In the second place, perhaps they thought it best not to refer to it; but after the Award was made on the cylinder basis, and the high rate placed upon cylinders 24 inches and over in diameter, then Mr. Nixon and his committee—I do not believe a single one of the present committee were with Mr. Nixon at that time—asked for a meeting and we met them. This was not only after the Award had been made, but after the interpretations of the Award had been made, and then and there Mr. Nixon and his committee—it was not Mr. Nixon personally, but his committee with him—proposed to abandon the cylinder basis, and they said the reason was that they were going to place superheaters on all of their engines, or many of their engines, and particularly on some of the smaller engines, and that to pay this high rate on those smaller engines was unjust to the railroads.

We in reply showed that it was unjust to us not to have a still higher cylinder basis; that if we got \$3.75 on a cylinder 24 inches in diameter, we ought to get \$4.00 on a cylinder 27 inches in diameter, and that there being only one cylinder basis, it should be adhered to.

We did, however, go so far as to consider the changing of the Award, when we were advised by our able counsel that we

could not change the Award, that the Award was a judgment, and that the Committee had no right to waive it for the men.

Before I go any further on that, it does seem strange to me, and perhaps to some members of the Board, that when railroad officials demand that weight on drivers shall be the basis, so much time should have to be expended and so much energy expended in trying to get that which the railroads want. That is the policy of wage bargains, and I do not charge it against them.

In the East we had a proposition of rates based on weights on drivers. The Eastern managers wrote a letter proposing weights on drivers as the basis; and yet when we went into the arbitration they put witness after witness on the stand to prove that weight on drivers was not the proper basis. So you see we have got to fight our fight; we have got to win our case, even though the railroads want what we want.

The rates of wages enumerated in this article of the proposition are less than should have been requested, if all other compensatory features of the proposition are not awarded in this Arbitration.

Wages of engineers and firemen have never been commensurate with their labors, responsibilities and hazard of occupation, and their wage increases of the past have not kept pace with their increased responsibilities, or their increased productive efficiency, or the increased cost of living.

Measured by the wages paid in other industries, engineers, firemen and hostlers are several years behind the wage progress of other American and Canadian working men.

The privilege, long enjoyed by railroads, of paying more wages to their employees than are paid by other employers to labor less skilled, less responsible and who assume less hazards, should be considered by this Board of Arbitration in reaching their award.

The higher rates of wages paid by railroads to engineers and firemen employed on the larger locomotives, as they have been introduced in the service, cannot be termed "increases" in wages, for it has been shown in evidence submitted by the railroads that on the same class of engines, but heavier engines, there has been an increase in rates of wages of engineers in the past twenty-nine years of only 18 per cent in passenger service

and 23 per cent in freight service. Within the past twenty-six years on the same engines, firemen have had their wages increased in passenger service 40 cents per day, or 20 per cent, and in freight service 70 cents per day, or 31 per cent. The slightly higher rates conceded on the larger engines, as they have been placed in service, have not been commensurate with the increased responsibilities and labors of engineers and firemen, resulting from the introduction of such large engines.

The wage increase of 1910 for firemen on all locomotives except on coal-burning engines in freight service, was awarded entirely because the cost of living had increased during the period subsequent to the wage increase of 1907, and including the year of 1909. The wage increase secured by engineers during the same year of 1910 was approximately the same percentage in the aggregate; therefore, it is fair to assume that engineers were granted this increase on account of cost of living, rather than the proper recognition of their increased responsibilities.

The wage increases of 1910 for engineers and firemen did not compensate them for the additional labor incidental to increased loading of engines of the same capacity, and did not recognize or give due consideration to the pronounced increased productive efficiency of engineers and firemen developed during the same period. We request that substantial recognition be now given to the increased productive efficiency of engineers and firemen, neglected in past wage adjustments.

Gentlemen, we make that assertion because we know by statements of the neutral arbitrators themselves that the 15 cents paid to all firemen, of whatever character, on oil-burning roads, was given entirely because of the increase in cost of living during the period covered. We know positively that at that time we did not present as effectively—we hope—as at this time, evidence to show that there had been an increase in the productive efficiency, that there had been an increase in the ability of the railroads to pay because of the increased earnings of the engineers and firemen. We do not charge it to the Board of Arbitration in 1910 that they did not consider these things. It was not presented in proper manner for them to consider, although I am the guilty person. We have presented it now, and we ask that it be considered.

The graduated rates of wages of engineers and firemen requested in this proposition were determined by a desire to be fair to the railroads, and yet have proper regard for the rights of engineers and firemen.

While the proposed rates of wages are advanced higher as the engines increase in weight, the increased earning capacity of the engineer and fireman is so much greater on the larger engines that the effect of the increased rates is not perceptible in the net earnings of the railroads.

I mean by that, our proposition applied to all the engines in service shows a greater increase requested on the very large engines than on other engines. Most of these engines, I might say, have been introduced since the wage movement of 1910; if not most of them, the vast amount of them.

At no time has any wage movement given the consideration to the additional laborious work, and the additional revenues of the company which these larger engines have resulted in, and for that reason we are asking a higher percentage on the larger engines than we are on the smaller engines.

The wage cost to the railroads of engineers and firemen per ton mile greatly decreases as the weight of the engine increases, notwithstanding the increase in wage cost per locomotive mile.

I may say, with perhaps a chance of exaggeration, that if on the Mikado engine one hundred times or five hundred times the rate of wages was paid to the engineer that is paid on the little engine weighing less than 80,000 pounds on drivers, the wage cost per ton mile would yet be less to the railroads, notwithstanding this ridiculously large increase in wages. It seems absurd to say that you can increase the wages 500 per cent. I am afraid it may be an exaggeration; but you can estimate for yourselves what forty or fifty cars being hauled 100 miles, weighing perhaps eighty tons to the car, and getting almost a dollar a ton for the trip, means to the railroad company in increased earning capacity. You can easily estimate what a great amount the engineer and fireman earn for the company, that it is impossible to earn by the engineer and fireman on the smaller engine.

The wage cost to the railroads of engineers and firemen per ton mile greatly decreases as the weight of the engine increases, notwithstanding the increase in wage cost per locomotive mile.

A higher rate of wages should be paid engineers and firemen on Mallet engines than on other engines.

For the same weight on drivers, greater responsibilities, labors and dangers confront engineers and firemen on Mallet engines than on other engines.

A Mallet engine is, in fact, two engines coupled together in a manner that makes it possible for railroads to operate them with one engineer and fireman, thus saving the expense of one engine crew.

The present differential of 15 cents per day for firemen on oil burning locomotives should be eliminated, and the rates requested herein should be awarded on all locomotives.

In other industries differentials in wages per day have not been established, and lower wages have not been paid because of the introduction of devices that reduce physical labor.

Where oil has been substituted for coal as a fuel, marine and stationary firemen have suffered no loss in wages per day and no differential has been established between their rates of wages.

When steam steering apparatus was installed on ships, no reduction of wages was suffered by the helmsmen, and no differential was established.

When hod carriers were relieved of climbing ladders with brick, by the introduction of hoisting engines, employers in the building trades did not enforce a reduction of wages, or insist on a differential in the wages of hod carriers where hoisting engines were installed.

When blacksmiths, helpers were relieved of swinging heavy hammers, by the introduction of steam or pneumatic hammers, their wages were not reduced and no differential was established.

Instead of wage reductions there have been repeated wage increases in practically all industries where physical labors of working men have been relieved by the introduction of labor saving devices.

If employes are not permitted to participate in the returns from labor saving devices and processes, industrial invention and progress will result in lack of economic advancement and in the degradation of wage earners.

There has been the contest, gentlemen, between the employer and employe, in all industries. In some industries, em-

ployers, including railroad officials in many instances, have conceded to their employes some of the economic advantages of labor saving machinery; but on the other hand, there have been employers, too many in number I regret to say, who have not only displaced employes of years of experience, but have sought the cheapest labor obtainable when labor saving devices have been introduced.

A graduated wage for firemen, by weight on drivers, or size of engines, where oil is used for fuel, has never been insisted upon for firemen, and it has been a well recognized principle that the ability of the employe to produce earnings for his employer is a fair basis for the graduation of wage rates.

During past wage negotiations railroads have not proposed a change from the practice of graduating firemen's rates of wages on oil-burning engines in the same manner as on coal-burning engines.

That the rates of wages are graduated in other industries in accordance with the importance of the work and the earnings for employers is observed in the practice of paying captains, mates and engineers on ships a higher rate as the tonnage of the vessel increased, is exemplified in the graduated rates of wages of motor truck drivers in proportion to the capacity of the truck and the increased earnings for the employer, and is the rule with professional men, who graduate their fee in accordance with the importance of the case.

In the leading industries, rates of wages of skilled workers are usually based upon their relative contributions to the unit of output, and it is the principle generally recognized as a proper basis of wage payments. This is also the underlying principle of bonus systems of wage payments and the so-called systems of efficient management. It is conceded that Engineers and Firemen should produce the maximum output, within the proper limitation of physical welfare, and having so exerted themselves, should be permitted by the Railroads to participate in the results of their efficiency. This participation is, to some extent, realized by the adoption of weight on drivers of locomotives as a basis of wage rates.

I particularly desire again to call your attention to the fact that, until the Arbitration of 1910, the Railroads themselves had not attempted to enforce a differential between oil and coal, and

had in fact seemed to desire and prefer that the wages of oil burning Firemen should be based on weight on drivers, graduated on weight on drivers, the same as coal burning engines.

I have heard it said by one of the Arbitrators, who was not a neutral, that the reason the Firemen lost that differential was because a lot of oil burning firemen came in there and tried to prove that their work was harder, and they failed to prove that. If that be the fact, we cannot object to the award, but it was a mistake, gentlemen. I believe the contentions here presented should have been presented in 1910, and we believe if they had been presented, never would there have been a differential between oil and coal.

We come now to Article 2, that portion of which refers to pusher, helper, mine runs, work, wreck, belt line, transfer and all other unclassified service. The rule is:

“Engineers and Firemen on Locomotives in pusher and helper service, mine runs, work, wreck, belt line and transfer service, and all other unclassified service, will be paid through freight rate according to the class of engine.”

It is contended that foregoing rule should be awarded because—

A standardization of rates of wages of engineers and firemen is impracticable if an attempt is made to fix a different rate for each and every class of service.

In past schedule negotiations, where differentials in rates have developed in the several classes of road service, it has been the result of compromise, the Railroads conceding as little as possible and the representatives of the Engineers and Firemen accepting what was offered, rather than take any action that would result in an interruption of railway business.

Practically all Railroads now pay through freight rates on all or some of the classes of service included in this rule.

The next subdivision of Article 2 relates to a differential on divisions where the grade is 1.8 per cent, and the rule is:

“On all divisions where grade is 1.8 per cent or over, an increase of 10 per cent over Valley rates will be paid.”

It is contended that the foregoing rule should be awarded because—

The hazard of the occupation is greater on Mountain grades.

The responsibilities and difficulties of controlling trains are greater on Mountain grades.

Without a differential or a higher rate on Mountain grades earnings of Engineers and Firemen are usually less than on valley divisions.

Usually Railroads receive greater revenue per ton mile as per passenger mile in mountain territory.

Aside from the danger or hazard of the employment and its disagreeable features, the fact remains that men in mountain service cannot make the miles that men on level divisions can, and if for no other reason, there should be that differential established.

The Chairman: Mr. Carter, was this intended to apply to what might properly be termed mountain service alone? Now, as I remember, they have cited instances here wherein, on a division the majority of which was perfectly level or practically level, there would be perhaps a rise where the grade would reach 1.8 per cent as indicated here, and that in that instance there would be a hardship owing to this slight difference in grade.

Mr. Carter: I do not think some of the cases cited here were ever intended by the makers of this rule. I think a case was cited on the Rock Island coming out of Peoria, where there is a 2 per cent grade in pushing out the bank, and otherwise it is an ordinary level country division. I do not think it was ever intended to apply there; I do not believe so. I do not believe it was intended to apply where there might be an occasional hump of more than 1.8 per cent. It is intended to apply, however, where a large proportion of the division is actually a mountain division. Now, I would not mean this. It is possible that on some of the worst mountain divisions we have, there is a projection of that division out into level country. I would say in a case of that kind, where it is an actual mountain division, it should apply to the entire division. I would say it would be unfair to go along with a yard stick and say, "Here it is 1.8 per cent and here it is not." If we would do that, we must confess that it is only 1.8 per cent up hill and it is 1.8 per cent down hill; and while the labors are greater, perhaps, in going up hill, or perhaps there are many other things that should have a differential, the fact remains that it is just as difficult, and perhaps

far more dangerous, to go down hill where the grade is more than 1.8 per cent than it is to go up hill.

The Chairman: Then are we to understand that it is the purpose of the men that this should apply to what might properly be termed a mountain division?

Mr. Carter: I believe it is the intention of this committee who drafted this—and understand, I was not on the committee, and this was drafted for us to present—I understand that the committee did not intend that any foolish hardship should be imposed on the railroads. They do, however, contend that they should be protected against any wrongful interpretation by the railroads on what does not constitute mountain service. It should be fair to both. We do not want to say anything here that will give the railroads a chance to say, “There is only 500 feet of this mountain that is over 1.8 per cent.” We cannot afford to have that kind of an interpretation placed in effect. We want a fair application of every proposition we make. And I will submit here, that if any of our men attempt to apply unfairly or if any of the railroads attempt to apply unfairly any of this award, we have a remedy in this Arbitration, and the Board that made the award will interpret it and say whether it is fair or not.

Article 2 also includes rates of narrow-gauge locomotives. The rule reads:

“On roads where narrow-gauge locomotives are in service, a 5 per cent increase over present rates in effect shall be granted.”

It is contended that the foregoing rule should be awarded because—

The peculiarities of the service have resulted in higher rates of wages for engineers and firemen being established in past wage negotiations on narrow-gauge railroads than on standard-gauge railroads for the same weight on drivers, and, hence, a 5 per cent increase in wages should now be awarded, account of the increased cost of living, if for no other reason.

In the preparation of this proposition the narrow-gauge locomotives were recognized as being very peculiar. They are low on their wheels, they are narrow between their wheels, and this makes it very difficult for men to get under the engines and inspect them and operate them, and there are many reasons why

the railroads themselves have conceded a higher rate per mile on their narrow-gauge engines than on the standard-gauge engines of the same roads. You will find that on some of the roads, where they have considerable narrow-gauge service, they have, of their own accord, always kept the narrow-gauge service higher than the standard-gauge service, and this proposition is a request that, whatever those rates be, there will be an increase of 5 per cent in those rates.

Article 2 also includes electric locomotives, either multiple unit or single, gasoline or other service. The rule is this:

"Wherever electric, multiple unit, gasoline or other service is installed as a substitute for steam, or is now in operation on any railroad parties to this agreement or on any of the tracks operated or controlled by any of them as part of their system, the locomotive engineers and firemen shall have the right to the position of motorman and helper, respectively. The term 'helper' will be understood to mean the second man employed on electric locomotives or other power.

"Seniority rights to be interchangeable. Steam rules, hours of service and mileage to apply with the following rates of pay."

In order to understand what is meant by tracks operated or controlled by any of them as a part of their system, a practice has grown up, particularly on the Southern Pacific Railroad, in order to avoid payment of wages to engineers and firemen, to have some other company operate the electric portion of that road. It is simply a subterfuge, not denied. By that action they can electrify all of their new road, paying as low a rate as they can secure men to do the work, and avoid the engineers' and firemen's agreement, or any agreement that might be made, or any award that might be rendered, just as they have reduced the size of cylinders. They can, when they attempt to electrify a track, sell it to a holding company, and the holding company may be owned body and soul, by the same people who own the railroads, and thus by subterfuge, they can avoid the application of this award. It is our purpose to avoid any such practice, if we can. Therefore, we ask that when a steam railroad builds, equips or operates any portion of its property by electricity, that whatever award is reached here, should apply to that, and not place a premium upon the peculiar methods of

organizing companies and owning companies, and so forth, as has been done in the past.

Mr. Chairman: I will not read these rates, but will ask that they be inserted as part of the record.

(The table is as follows):

“Passenger Service.	Motorman Helper.	
“20,000 lbs. tractive power and less	\$4.50	\$3.35
“Over 20,000 lbs. tractive power and less than 25,000 lbs.	4.60	3.35
“Over 25,000 lbs., tractive power and less than 30,000 lbs.	4.70	3.35
“Over 30,000 lbs. tractive power and less than 35,000 lbs.	4.80	3.35
“Over 35,000 lbs. tractive power and less than 40,000 lbs.	4.90	3.35
“Over 40,000 lbs. tractive power and less than 45,000 lbs.	5.00	3.35
“Over 45,000 lbs. tractive power and less than 50,000 lbs.	5.15	3.35
“Over 50,000 lbs. tractive power and less than 55,000 lbs.	5.35	3.35
“Over 55,000 lbs. tractive power and less than 60,000 lbs.	5.50	3.35
“Over 60,000 lbs. tractive power.....	5.60	3.35

“All other service except Passenger and Switching.

	Motorman Helper.	
“20,000 lbs. tractive power and less.....	\$5.00	\$3.75
“Over 20,000 lbs. tractive power and less than 25,000 lbs.	5.20	3.75
“Over 25,000 lbs. tractive power and less than 30,000 lbs.	5.30	3.75
“Over 30,000 lbs. tractive power and less than 35,000 lbs.	5.40	3.75
“Over 35,000 lbs. tractive power and less than 40,000 lbs.	5.60	3.75
“Over 40,000 lbs. tractive power and less than 45,000 lbs.	5.80	3.75
“Over 45,000 lbs. tractive power and less than 50,000 lbs.	6.00	3.75

	Motorman Helper.	
"Over 50,000 lbs. tractive power and less than		
55,000 lbs.	6.20	3.75
"Over 55,000 lbs. tractive power and less than		
60,000 lbs.	6.40	3.75
"Over 60,000 lbs. tractive power and less than		
65,000 lbs.	6.60	3.75
"Over 65,000 lbs. tractive power and less than		
70,000 lbs.	6.80	3.75
"Over 70,000 lbs. tractive power.....	7.00	3.75
"Switching Service.	Motorman Helper.	
"20,000 lbs. tractive power and less.....	\$4.75	\$3.10
"Over 20,000 lbs. tractive power and less than		
40,000 lbs.	5.00	3.10
"Over 40,000 lbs. tractive power and less than		
60,000 lbs.	5.50	3.10
"Over 60,000 lbs. tractive power.....	6.00	3.10

It is contended that the foregoing rule should be awarded, because—first, the electric question is an economic question; a question as to what is to become of steam railroad employes as electric locomotives are substituted for steam locomotives; a question as to permitting the genius of the inventor and the avarice of the employer depressing the American standard of living instead of adding to the economic welfare of the engineers and firemen, as should result from the substitution of electric for steam power. Employes should be privileged to share in the productivity and economic advantage resulting from the introduction of labor-saving and profit-producing machines that can be operated at a comparatively low cost.

As wonderful printing inventions have brought to the employer prosperity, to the masses of the people cheaper books and newspapers, and to the employes in the printing trades better wages and improved conditions, the Engineers and Firemen should also share with the Railroad employer and the public the profits and benefits arising out of the introduction of electric locomotives.

The Engineers and Helpers have just as great responsibilities and must possess the same knowledge of train rules and operation as in steam service.

So far as the responsibility, the technical requirements, are concerned, there is or should be no difference whatever. If there is a difference, it is solely because of the fact that the Railroad employer will exchange safety for dollars and cents. The only reason that strict responsibility and technical knowledge is not required of employes, and the only time it is not required is when it has been deemed by the employer that he will take the chance incident to the risk of incompetent help, in consideration for what he saves in wages.

The Chairman: Well, on these electric roads, are the same signals and other agencies employed that are employed on steam roads?

Mr. Carter: They should be identically the same.

The Chairman: And are these men required to have knowledge of these matters?

Mr. Carter: We contend that they should. And worse than that. There may be a road operated by both steam and electricity, and there may be, as in the case of some of these Western Railroads, a case where the electric motor is dodging in and out between freight trains, steam trains, and there I say that the knowledge should be even higher, if anything, rather than lower, and the responsibility is equally as great, because the men operating those motors are on what are known as inferior trains; everybody has a right over them, and they must look out for themselves.

The Railroads should not deprive their Engineers and Firemen of the right to employment in electric service they now possess in steam service. It is unfair that by this substitution of electric locomotives for steam locomotives that employes who have been long in railroad service should be dispossessed, should be denied employment.

Only experienced Engineers and Firemen should be permitted to operate trains propelled by electric locomotives. As a chain is no stronger than its weakest link, an inexperienced Engineer in charge of an electric locomotive may cause disaster to himself and others, although every other engineer in the same service and on the same track may be thoroughly competent.

The wage cost per ton mile to the Railroads of engineers and firemen employed on electric locomotives and electric trains

is much less than with steam locomotives at the same wage rate per day.

Pardon me if I read a few citations. I want to read from an address by C. L. DeMault, Professor of Electrical Engineering, University of Michigan, and Member of the American Society of Civil Engineers, which will be found in Employees' Exhibit 54, pp. 22-23.

"If we take the most favorable points for each type of locomotive with reference to actual service capacity, the Consolidation is seen to be at its best at about 11 M. P. H., and can then move about 4,400 ton-miles per hour. The Mallet is at its best at about 13 M. P. H., and at that speed is capable of moving 6,100 ton-miles per hour. And the electric locomotive is at its best at about 20 M. P. H., when it can handle about 22,000 ton-miles per hour. At the maximum point the Mallet can therefore haul about 39 per cent more than the Consolidation, and the maximum service capacity of the electric is five times as great as that of the Consolidation and 3.6 times that of the Mallet.

The explanation of this tremendous increase lies, of course, in the fact that the electric locomotive cannot only haul a greater tonnage than the Mallet or the Consolidation, but it can haul this greater tonnage at a much higher speed."

When Exhibit 3 was presented by myself as witness, I endeavored to explain that electric locomotives with the same weight on drivers had much greater tractive power. I shall repeat some of it. A locomotive is what is known as a reciprocating engine, "a push-and-pull" engine. It pushes and pulls. And because of the angularity of the rod, it is only at two points during the revolution of the driver that the full power is exerted. With an electric locomotive there is a constant twist, so that the same power is exerted at every point of the revolution. The result is that with an electric locomotive you can exert a much higher tractive power without at any time exerting as great a power at some particular point. With the steam locomotive the impact must be so great as to make up for the loss of power on what we call the center. With an electric locomotive, the impact or impulse is at all times the same. The electric locomotive is less liable to slip than the steam locomotive, and

the electric locomotive with the same weight on drivers is a far more efficient engine than is the steam locomotive.

And referring to employes' Exhibit 54, p. 20:

"The operation of steam Railroads by electricity is no longer in the experimental stage. Electricity as a means of motive power has been tried out very extensively and has proved to the world that it is more reliable than steam and has many advantages over it."

We now come to Article 3, "Local or way freight service."

"Local trains are way freight or mixed trains whose work is the loading or unloading of freight or doing station switching en route."

That part of the rule is a definition. It is intended to be a definition, because definitions are essential if rules are to be applied.

"Engineers and Firemen on such trains will be paid ten per cent increase over through freight rates."

"Through or irregular freight trains doing work such as loading or unloading freight, stock or company material, switching at stations, spurs, mines, mills, or required to take out or set up cars, unless cars to be picked up are first out, or cars to be set out are switched together at terminals, for doing any other similar work, shall be paid for same as overtime rates in addition to time or mileage made on the trip."

It is contended that the foregoing rule should be awarded, because—

The station switching and other work peculiar to Local Freight Service results in a decrease in the average speed of such trains between terminals, thereby greatly decreasing the earnings of engineers and firemen for the same period of service. Through freight rates are based upon the theory that under favorable conditions engineers and firemen may earn in that service the premium or bonus that is paid when trains are transported at an average speed of more than 10 miles per hour. In Local Freight Service, engineers and firemen seldom are paid on the mileage basis.

The definition of Local Freight Service, made a part of this rule, is necessary if evasion of the award is to be avoided.

A clear and comprehensive definition of when and where

and under what conditions wage increases are to apply is essential if their purpose is not to be defeated by methods of application. Some railroads contend they do not operate local freight trains and base their contention on the fact that on such railroads local freight trains are known under some other name.

To avoid the high rates of wages per mile paid to engineers and firemen in local freight service such trains may often be abandoned and through freight engineers and firemen required to perform local freight work for the lower rates of wages; or to avoid tying up local freight trains in the application of the Federal Hours of Service Law, it is not unusual to assign much of the work of local freight trains to through freight trains, thus reducing expense of operation to the railroads and increasing the labors and hours on duty of the engineers and firemen in through freight service, without the local freight compensation. When this work is required of engineers and firemen in through freight service, additional compensation should be paid.

I would like, gentlemen, in that connection, to quote from *Employes' Exhibit 88*, page 7, from the statement by Mr. H. D. Judson, who was at that time General Superintendent of the Illinois Division of the C. B. & Q. Railway. He said: "The Way-Freight trains, of course, there are times when trains are on the road over fifteen hours. That can scarcely be avoided."

The witness Trenholm for the Railroads, at pp. 5746-5747, says:

"I think, Mr. Chairman, that a freight train going out and doing the work of a way freight train, unloading merchandise and doing the local switching through the country, yes, that he is entitled to the pay. It is a question of degree; how much does he do of it? If you start a train out, the mere fact that you started out as a through train and then used it from station to station to do this work and make practically a way freight out of it, you should pay the local differential."

There is brought out, by Mr. Trenholm, the necessity of a definition. The rule should be so explicit that the employe could not unfairly contend for that which was not due, and the Railroads could not unfairly withhold that which was due.

Article 4 "Switching Service." This article shows the rates, and I will ask that they be included.

	Engineers.	Firemen.
“Engines weighing less than 140,000 lbs. on drivers	\$4.75	\$3.10
Engines weighing 140,000 lbs. and over on drivers	5.00	3.25
Mallet type engines	6.00	4.00

“Engineers and Firemen required to begin service other than between the hours of 6 A. M. and 8 A. M., will be paid 2 cents per hour, in addition to above rate.”

In all industries of which I have knowledge, the employer is required to fix the working hours of the employe. In most industries on the 8 hour day I believe that they fix the hour for beginning work at 7 o'clock, and that they allow twenty minutes or thirty minutes for meals, and then close so as to have the eight hours work when completed. If in other industries men are called to perform eight hours' work in any other period of the day, they are paid higher wages. You will perhaps recall that the Chicago, Milwaukee & St. Paul Railroad by its agreement with its machinists have the shop rules posted saying just what the hours are that men are required to work, and if they are required to work outside of those regular hours they are paid time and one-half. Here we simply request that 2 cents per hour in addition be paid.

“Ten hours or less will constitute a day's work in switching service. Time to be computed continuously, all over ten hours to be computed and paid for at the rate of time and one-half. All overtime to be computed on minute basis.”

“Switch Engineers and Firemen will not be required to work longer than six consecutive hours without being allowed thirty minutes undisturbed for meals.”

“When Road Engines are used in yard service, road rates will apply.”

If there are any classes of employes whose wages have been neglected in the past in wage negotiations, the engineers and firemen in switching service, and the hostlers make up that neglected class.

The fact that engineers and firemen in switching service have never possessed the numerical strength to effectively bargain for rates of wages commensurate with their responsibilities and duties has resulted in a lower rate of compensation per hour

for them than for employes of similar importance in any other industry. The rates of wages per hour requested in this rule for engineers are less than wages paid by employers in many other industries for skilled workmen. The rates of wages requested for firemen are less than hod carriers and building laborers are paid. Engineers and firemen are forced to work from ten to fourteen and often sixteen hours in a single day. The Railroads have presented evidence that clearly establishes the fact that some engineers and firemen in switching service were required to work an average of 14 hours per day. It should be remembered by Board that with the extension of yards in congested districts the safety of the passenger train to a very great extent devolves upon the faithfulness, alertness and skill of the engineers and firemen in switching service. Because of the assertion of their wage-bargaining power, other employes of railroads in switching service have made far greater advance in wage rates than have engineers and firemen.

I particularly refer to the yard switchmen and the yard conductors, some roads call them yard brakemen and yard conductors, other roads call them yard switchmen and yard foremen. They have been quite aggressive in their wage movements, and the result of their aggression is made plainly evident in their wages. Their wages are so much higher than that of the firemen it seems incredible that such a condition could exist, but they have the wage-bargaining power to get it, and they get it, while the locomotive firemen did not possess that wage-bargaining power. We hold that that which has been left undone by aggressiveness of the employes, by threats to strike or by strikes, should now be remedied by Arbitration.

If the percentage of increase in rates of wages requested for engineers and firemen in switching service exceeds the percentage in requests for other service, it is because the present rates are so low, and not because the requested rates are excessive.

Rates of wages of engineers and firemen in switching service are lower, proportionately, than wages of other employes in the same service.

The higher rates requested on the larger engines in switching service are equitable, because—

The larger engines are maintained where the heaviest work is required of engineers and firemen. The smaller engines are

usually in service at the less important switching yards or assignments. Thus, the theory of increased rates of wages for increased responsibility and labors and increased productive efficiency is maintained for switching service in this proposition.

Some railroads have insisted on paying a lower rate of wages to engineers and firemen in what has been designated as "second class" yards, upon the theory that the work is not so arduous. By the gradation of rates of wages by weights on drivers, as in this rule, railroads are privileged to pay a lower rate where work is less important by the assignment of a small engine to such work.

The request that an additional two cents per hour be paid for night work in switching service is justified.

The extra hazard to which engineers and firemen are exposed, the hazard of loss of employment by penalties imposed by railroads for accidents which occur with greater frequency at night, and the hazard of personal injury received in such accidents, demands a higher night rate. Ordinarily a switching crew consists of five men, and the Railroads and other Boards of Arbitration have already recognized that three members of this crew should receive a higher rate for night work. The other two members of the switching crew, the engineer and fireman, are entitled to as much consideration.

No engineer or fireman should be required to work more than ten hours of each twenty-four hours in switching service.

If railroads find it profitable to require engineers and firemen to work more than ten hours, railroads should pay the usual overtime rate of "time and one-half."

Contention of railroads that engineers and firemen in switching service cannot profitably be relieved from duty at the expiration of ten hours is in keeping with the opposition of employers to any amelioration of conditions under which employes labor; and, should their contention be well founded in some instances, no better evidence could be presented than the rates and overtime rates requested are not excessive, for an employment so arduous and exacting. It is not conceded that engineers and firemen in switching service cannot be relieved from duty at the expiration of ten hours, and contentions to the contrary are prompted by pecuniary interests. If the exigencies of railroad business demand that the railroads be privileged to retain a lien

upon the time that is required by the employe for rest and recreation, then the employe should be compensated at a higher rate, not only because he is required to sacrifice rest and recreation, but is compelled to forego the pleasures of home comforts and association with family.

Payment for overtime at rates higher than rates for the usual hours of employment is a well-established practice in all leading industries except by the railroads, to employes in conducting transportation. To shop employes of railroads time and one-half is paid for overtime, which is a recognition by railroads of the correctness of the principle.

The unfairness of the attitude of railroads in their opposition to the payment of overtime rates to engineers and firemen is found in testimony and other evidence presented by the railroads that certain engineers and firemen have been paid abnormally high wages over stated periods of time. It has been shown by the railroads in this Arbitration that certain engineers and firemen have earned practically two men's wages by performing two men's work; that by working practically sixteen hours a day earnings have been abnormally high. All employers have usually found methods of avoiding the payment of overtime when the overtime rate is time and one-half or double time, as in most industries.

That engineers and firemen should not be required to work longer than six consecutive hours without being allowed thirty minutes undisturbed for meals is a request found in this rule, and it is our opinion this should be awarded.

Switching service requires the constant efforts of engineers and firemen to observe and obey signals and switching engines are usually designed with this requirement in view. Road engines are usually equipped with high tenders, over which nothing can be seen by the engineer and fireman. Road engines are usually difficult to reverse, and as in switching service engineers are constantly reversing engines, their labor as well as responsibilities, are increased by the use of road engines for switching purposes.

There is no question, gentlemen of the Board, that the use of a road engine for switching purposes is not only additional work and hardship upon the engineer and fireman, but it adds

greatly to their difficulty in seeing signals, for the observance of which they are held responsible.

Article 5 is "preparatory time."

"Engineers and Firemen in all classes of service will be allowed thirty minutes as preparatory time in addition to all other time or mileage made on the trip or day, at the pro rata rate corresponding with class of locomotive and service; provided, that on lines of Railroad where rules or schedules require them to be on duty more than thirty minutes before time ordered to leave roundhouse or other point, they will be allowed one hour's time, and when required to be on duty more than one hour, actual time will be allowed. Preparatory time will be the time Engineers and Firemen are required to be on their locomotives, prior to time ordered to leave roundhouse or other point."

It is contended that the foregoing rule should be awarded because—

The preparation of a locomotive for service is an essential feature of the duties of both Engineers and Firemen.

An engineer is required to inspect a locomotive and assume responsibility for all undiscovered defects; to attend and adjust all lubricating attachments and assume responsibility for their perfect working; to inspect and assume responsibility for the perfect working of air brakes and other mechanical devices that make up important adjuncts to the operation of a modern locomotive; to inspect train registers for the purpose of ascertaining the arrival and departure of trains that in any manner affect the safe operation of the train he is to pull; to inspect bulletin boards for the purpose of observing rules and orders posted for his guidance since his last trip; to compare his watch with the official timepiece of the railroad by which he is employed. After all these duties have been performed he is ready to receive his running orders and begin the work for which railroads are willing to pay.

A fireman is required to assist the engineer in such duties as may be assigned him; to assume his portion of responsibility for inspection of bulletins, correct time of his watch, and so forth; to inspect and assume responsibility for the presence on the engine of proper tools, supplies, coal, oil, water, signal devices, and so forth, and if not on the engine, to secure them; to inspect

fire box and prepare fire for the trip; to inspect ash pan and assume responsibility for its condition. After all of these duties have been performed, he is ready to begin the work for which railroads in the past have been willing to pay.

This preparatory time should be paid for, in addition to all other time or mileage made on the trip, because—

If not paid for "arbitrarily," or distinct from other service, a premium will be placed on railroads not requiring so important a service to be performed, or engineers and firemen may not be given sufficient time to properly perform preparatory work, without being relieved of the responsibility for same. This being a separate and distinct service, a safe and successful trip must depend on its faithful performance, and it is unfair that railroads should decline to compensate engineers and firemen therefor.

If for no other reason than their own personal safety, engineers and firemen should prepare the engine they operate.

The safety of the traveling public and other employes of railroads is conserved by placing the responsibility for inspection and preparation of engines for service upon the engineer and fireman that operate that engine.

I find, gentlemen of the Board, it is taking me a great deal longer to complete this than I anticipated. I find myself getting in the habit of diverting and saying some things that might perhaps be left unsaid; but we are interested in what we say, I assure you, and if it takes longer than I anticipated, I hope you will bear with me.

The Chairman: It is all right, take all the time you desire for the presentation of the matter.

Mr. Carter: Article 6 pertains to terminal delay. The rule is:

“Initial terminal delay for Engineers and Firemen in passenger service shall begin at the time they are called to leave roundhouse or other point and shall end upon departure of trains from passenger depot.

“Final terminal delay for Engineers and Firemen in passenger service shall begin at the time they arrive at passenger depot, and will end when relieved from duty.

“Initial terminal delay in freight service shall begin at the time Engineer and Fireman are called to leave roundhouse or

other point and shall end when train has passed from yard track or lead to main line, and actually departs from the terminal.

“Final terminal delay in freight service shall begin when train arrives at switch leading from main line into yard, and shall end when Engineer and Fireman are relieved from duty; provided, that if from any cause trains are held out of yard, final terminal delay shall begin.

“Engineers and Firemen shall be paid on a minute basis for all terminal delay; at the pro rata rate for the class of engine used; this in addition to all time or mileage made on the trip.”

It is contended that the foregoing rule should be awarded, because—

For the purpose of preventing railroads requiring engineers and firemen to report for duty before their services are needed, this rule has been requested.

The rule is intended to be a penalty imposed upon railroads that permit their engineers and firemen to be called for duty and then detained in the terminal, or that permit engineers and firemen to be detained after they have completed a road trip.

The burdensome duties of engineers and firemen, and the long hours of employment should guarantee them complete rest when not required for service.

The payment for terminal delay on the minute basis is most equitable to the railroads and to the engineers and firemen, as the men receive pay for only the actual time delayed, and the railroads are not required to pay for more time than actually delayed.

Payment for terminal delay should be in addition to all time or mileage made on the trip.

Unless the payment is “arbitrary,” or independent for payment for road service, there will be no incentive for railroads to abandon the practice of detaining engineers and firemen at terminals when the road trip can be, or has been, made at a speed that would avoid overtime. If, by earnest efforts, an engineer and fireman have succeeded in transporting a freight train in less than ten hours, for which they have received pay for 100 miles, the railroad should not be permitted to detain them, because it could be done without incurring the expense of overtime.

The Chairman: Will you kindly suspend? We will take a recess until 2:30 P. M.

(Whereupon, at 12:30 o'clock P. M., a recess was taken until 2:30 o'clock P. M.)

AFTER RECESS.

Mr. Carter: Mr. Chairman and gentlemen, at the time of the noon hour adjournment we had just completed Article 6, relating to terminal delay.

There are several citations here which we deem of great importance, but we will not read them, expecting that perhaps they will be referred to later in the consideration of the entire matter.

Article 7 is entitled "Automatic Release and Tie-up," and the rule is as follows:

"Engineers and Firemen arriving at terminal or end of run are automatically released; when used again, they begin a new day.

"Engineers and Firemen tied up between their terminals will be paid continuous time, no deductions will be made for time tied up."

So long as railroads avail themselves of the low rates of wages peculiar to the mileage basis, they should not be permitted to deprive engineers and firemen of the premium or bonus feature of the mileage basis of wage payments.

Since the beginning of wage bargaining between railroads and engineers and firemen, a low rate of wages per hour has been agreed upon because at that time trains were usually run at high speeds, and 100 miles for a day's pay could be made in much less than the hours constituting a "day." As a bonus to engineers and firemen who transported a train expeditiously, no deductions were made in the day's pay because the full number of hours were not worked. With the gradual increase in weight and number of trains speed has been reduced to an extent that a majority of engineers and firemen now seldom profit by this bonus. The hours were fixed by a desire to meet the ordinary delays, such as hot boxes and delay at meeting points, but were never intended to permit railroads to employ such time after arrival at terminal, or to secure additional service without compensating therefor.

The mileage basis of wages being but an application of the piece work system, like employes in other industries where the piece work system is in effect, engineers and firemen have found that each "piece" or mile is becoming more difficult to perform, with a consequent reduction in earning power, even though the rate per piece, or mile, has increased.

The automatic release is essential if any semblance of bonus for fast work is to remain in practice. When an engineer and fireman reach a terminal, they should be relieved from that day's work, and other men who have been at that terminal without work should be assigned to the next trip, and this has been the practice.

Since this arbitration has commenced, some railroads are deviating so far from past practice and the intent of existing wage agreements, that engineers and firemen, after having transported a passenger train over a division of railroad in the usual manner, are then required to double back over the same division with a freight train and paid for mileage made in each service, as for one trip, because the division is less than 100 miles in length. The awarding of the automatic release feature of this rule is necessary if such abuse is not to become the practice.

As never before, the automatic release rule or its intent is now necessary. Within the last year or so some railroad officials on some roads have conceived the idea that they should be permitted to use engineers and firemen to the full extent of the ten hour period. And without negotiating a change in the rules, as is provided for in the wage agreement on each road, new interpretations are placed up existing rules, and it is claimed by these railroads that under the new interpretations a man may run backward and forward over divisions. The first-in-first-out rule has been eliminated without any change in the language of the schedules, simply a new application.

Now a peculiar thing about that is this, no matter how much the engineer and fireman would like to violate the schedule they have no opportunity to do so. It may be that the engineer or fireman, or their committees are just as unfair as are the railroads or the officials of the railroads. But there is this difference: An engineer or fireman may contend for an unfair interpretation of a rule, but that is the end of it. He has not the application of that rule within his power. But the railroad offi-

cial, on the other hand, may follow a rule under a certain interpretation for years, and then without any change in the language of the rule place a new interpretation on it, and enforce it, and the engineer or fireman finds at the next month's pay his wages have actually been reduced by a new interpretation upon the rule. In wage schedules the employer has the right or has the privilege or has the opportunity—has the power to apply the schedule any way he desires. Whether it is fair or not is not a matter to be considered. On the other hand, the employe has but one recourse, and that is to kick, to complain, to protest. As I said before, I am not saying that the employe is not disposed to be as unfair as the employer, but the opportunity is not there. The employe may want to be unfair and cannot, because it is the employer who says what the wages shall be.

The Chairman: I understood Mr. Stone to say that this rule was not to apply to certain lines. Now what lines?

Mr. Carter: The automatic release was stated in a communication to Chairman Trenholm sometime last summer not to apply to suburban service, and much of the evidence and much of the estimated cost of the proposition has been based by the railroads upon the supposition that it is to apply to suburban service.

The Chairman: Do I understand you to say that these exhibits showing abnormal rates, were based on the suburban service?

Mr. Carter: Yes, sir.

Mr. Sheean: No, you are mistaken.

Mr. Carter: Then I beg your pardon.

Mr. Sheean: Suburban service estimate was excluded.

Mr. Carter: It was excluded, was it?

Mr. Sheean: Yes, but it applies still. The mine run has not been excluded by any request, and the estimate was made to cover and include mine runs and short turn arounds. No such exception has been made.

The Chairman: Is it your purpose to have it apply to mine runs and short turn arounds?

Mr. Carter: Yes, sir, our purpose is to make it apply, with reason. Now, if a mine run is like a suburban run, I would say that it would not apply. If it is like a suburban run, backward and forward.

The Chairman: What do you mean by that, that it is capable of being made in an hour, we will say?

Mr. Carter: I would not say as to time, but it is not the intent, gentlemen of the Board, that the automatic release should apply to this suburban service, where it is shown here that a man can make, I believe—

The Chairman: \$35.00 a day, I believe.

Mr. Carter: No, more than that. They had a man earning—

Mr. Sheean: \$1,400 a month, on a regular passenger run on the Santa Fe, which is not suburban.

Mr. Carter: I will say frankly, without consulting anybody, that it is not intended that any man shall make \$1,400.00 a month.

Mr. Park: Where will you draw the line?

Mr. Carter: I think the Board will draw the line. I imagine if it is left to the Managers' Committee and the General Chairmen, they would not arrive at any adjustment. It will take some good, kindly friend, like the members of this Board, to tell us what we do want. Neither side would make any concessions.

In regard to this automatic release, perhaps the term "automatic" injures the contention. The automatic release is something like some of the railroad companies' automatic fire doors and automatic ash pans; it takes some work. They are not entirely automatic, it takes some power to put them in effect.

The reason we have used the word "automatic release" is that we want the release without special permission from an officer to have it. We want the rule to be so rigid that, without asking any questions, it is known that a man is released when he reaches a terminal. That is why we call it an automatic release. If it were not automatic to that extent, every engineer and fireman would have to sit on their engine until they got a special order from the operating officer to get off their engine. To that extent it is automatic.

The mileage basis of wages being but an application of the piece-work system, like employes in other industries where the piece-work system is in effect, engineers and firemen have found that each "piece," or mile, is becoming more difficult to per-

form, with a consequent reduction in earning power, even though the rate per piece, per mile, has increased.

The automatic release is essential, if any semblance of bonus for fast work is to remain in practice. When an engineer and fireman reach a terminal, they should be relieved from that day's work, and other men who have been at that terminal without work should be assigned to the next trip, and this has been the practice.

If railroads desire to be relieved of the payment of a bonus for a fast trip or a short trip, they should be as liberal as other employers, and agree to a short work day, with time and one-half for overtime on week days, and double time for overtime on Sundays and other holidays. Until such time as engineers and firemen work under such liberal condition, the automatic-release should protect them from abuse.

The automatic release is necessary if an equitable distribution of work between engineers and firemen is to be maintained.

The first in first out rule for the distribution of work has been in effect since the beginning of wage bargaining on railroads. By its application, discrimination in the apportioning of work has been impossible; by its application, engineers and firemen have been relieved upon arrival at terminals, and the engineer or fireman longest out of work has been next assigned. To prevent the abrogation of these practices long in effect the rule should be awarded.

When engineers and firemen are relieved from duty at other than home terminals, the automatic release is necessary to avoid the injustice of doubling one engine crew out of such terminal while other engine crews may have been denied work but have incurred the expense of living away from home. Each engineer and fireman should retain his past privilege of taking his turn out of a distant terminal, and to insure this privilege the automatic release rule should be awarded.

By new and strange interpretations of existing wage agreements, some railroads have recently attempted to exact additional work from engineers and firemen without compensating them for such work. To prevent a gradual development of such surreptitious method of wage cutting, this automatic release rule should be awarded.

In a vast majority of tie-ups of engineers and firemen between terminals, in the application of the Federal Hours of Service Act, the cause is the overloading of the train.

The overloading of freight trains is the most effective method of increasing revenues of railroads, and, at the same time, reducing labor cost of product. That in the application of this pronounced feature of modern managerial efficiency, freight trains are occasionally tied up, and engineers and firemen are sorely inconvenienced, is a matter of such small concern that it has been accepted on some railroads as one of the usual and expected incidents of freight service. We respectfully submit that railroads should pay engineers and firemen continuous time from terminal to terminal in this revenue producing operation.

The Chairman: I would like to ask you another question, Mr. Carter. Suppose you have a train leaving Chicago, we will say, to some point fifty miles distant; you have 100 miles run, that is fifty there and fifty return, making the one hundred; as I understand, on your proposition of five hours, 100 miles—

Mr. Carter: That is, in passenger service.

The Chairman: Yes, supposing he runs the fifty miles out, would he be released and get his full pay, and another man take his place, and the company be required to pay for the day?

Mr. Carter: Yes, sir, if that is the end of his run.

The Chairman: But under the schedule, is it possible to make a run, say from Chicago fifty miles and back? Is that ever done in the schedules?

Mr. Carter: There are such runs now in effect on many of the roads, Mr. Chairman.

The Chairman: Well, would such a run be possible if we were to adopt what you are pleased to term the automatic release rule?

Mr. Carter: I would say not. Relief from duty as required by the Hours of Service Law, is essential, if safety measures are to be observed by railroads, but when railroads require engineers and firemen to perform service between terminals beyond the limitation of this Sixteen Hour law, in order that freight trains may produce a greater revenue, the expense of the tie-up should be borne by the railroad instead of by the engineer and fireman, as has been the practice since the Federal law became effective.

The deductions by the railroads from the wages of engineers and firemen of pay for time tied up under the law are, in fact, penalties imposed by the railroads upon the engineers and firemen for failure to accomplish the impossible. As well may a driver deny food to his horse that has stalled on the hillside because of the overloading of his wagon. The one is as consistent and humane as the other, and we respectively submit that the award arising out of this arbitration include the rule requested.

Without referring to the many citations which are published in the brief, I would ask that special attention be given those citations in reaching the conclusions.

The Chairman: Let me ask you one more question.

Mr. Carter: Yes.

The Chairman: Suppose he made the 50-mile run in two hours, and there was a lay-over there of say 30 minutes. He has worked only two hours, and has had a lay-over of thirty minutes. Still it is your idea, is it, that another engineer should be employed to make the return trip?

Mr. Carter: Under the proposition, that is the intent, Mr. Chairman, but I will confess I do not see where they would get another engineer, if it was a turn-around point.

The Chairman: Notwithstanding the fact that he could make the return trip and come home within the five hours, as set forth in your first proposition?

Mr. Carter: Yes, a strict interpretation of the language of the proposition would mean that.

The Chairman: Would or would not that, in your opinion, be a hardship?

Mr. Carter: I will say that I do not believe any of the propositions here are intended to be a hardship on anybody.

The Chairman: I am sure they are not intended to be, but we have got to think about final results now.

Mr. Carter: The intent of the proposition, Mr. Chairman and gentlemen, is that when the engineer and fireman reach that point to which you refer, that is the end of their run, the terminal, they will then be released automatically.

Now, on pages 39 and 40 are a considerable number of citations upon this subject which show that the necessity of tying

up a train between terminals is a direct result of the overloading of trains.

The Chairman: Are there any roads, either in the Eastern or Southwestern section, where they have this rule or a similar rule?

Mr. Carter: I think not. There is no rule like that in existence.

I think it was in 1908 that the Federal law became effective, and almost immediately the Western railroads and representatives of the engineers, conductors, firemen and brakemen met a committee here in Chicago and there was a prolonged discussion then. I am sure the representatives of the employes advanced strong arguments why employes should not be punished because they had secured the enactment of the Federal Hours of Service law.

These citations with regard to being tied up under the Hours of Service law are the matters which I am now discussing. At that time, in 1908, as I have said, this meeting was held here in the city of Chicago. There is no question but what the railroads greatly resented the activity of the employes in securing the enactment of that law, and there is no doubt but that they tried to transfer all the burdens of that law onto the backs of those employes, and notwithstanding the talent that those employes had to represent them at that time, I am sorry to say that the railroads succeeded in doing so. As I have said, the burdens of the Hours of Service Law have been transferred to the men in train service by this deducting of the payment for the time they are tied up. We contend that it is not fair. It is agreed by railroad officials, not here but elsewhere, that the only reason that a train is tied up, except in case of a wreck or something of that kind, is because of the overloading of the train.

In the discussions which brought about the enactment of this law, at the hearings of Congressional Committees at that time, prominent railroad officials did not hesitate to say that in order to get over the road they would have to reduce the tonnage. Mr. Willard particularly says this in answer to questions by Mr. Mann, who was a member of the Committee if not the chairman of the same:

“Mr. Mann: Suppose you had a coal train out that had

been delayed so that it would not reach its terminal in sixteen hours at the rate you usually had the train go. Would it be possible, with a little extra work in firing, to get up steam enough to make the train run faster?

“Mr. Willard: No; I have assumed that the train makes the speed I have spoken of with the engine doing what it was intended to do.

“Mr. Mann: You are assuming that the trains are heavy enough to exercise the full duty of the engine, so that you can not make any better speed?

“Mr. Willard: Yes.

“Mr. Kennedy: (Another member of the committee): To increase the speed you would have to lessen the load?

“Mr. Willard: That is what we would have to do. We do that with Fast Freight trains because we cannot do anything else. As I said, we get only 68 per cent of the capacity of the engine on Fast Freights.”

It is conceded, I think, gentlemen of the Board, that it is the effort to secure as great a revenue out of one train unit as possible that results in these tie-ups at the end of 16 hours, and as stated before, notwithstanding this settlement, so-called, made in Chicago, as soon as that law became effective, the engineers and firemen should be paid for that tie-up or else enough of the train should be set out so the train could get in to avoid being tied up.

Article 8. “Held away from home terminals.”

The Chairman: In considering this automatic tie-up, is there any difference between the freight service and the passenger service, do you think, in its application?

Mr. Carter: You mean to say the automatic release?

The Chairman: Yes.

Mr. Carter: It is intended to be exactly the same.

The Chairman: I mean is there any reason why it should apply to the freight service more than the passenger service? I didn't know but perhaps there was some reason why it would apply to one more than the other.

Mr. Carter: Well, if anything, I should say it ought to apply to the passenger man more than anybody else, for this reason, because of the fact that he can get over the road fast there is a continuous invitation there on the part of the railroad to do

another half day's work, and we don't want them to do that. An engineer or fireman may get over 150 miles, we will say, transport that train right on time, perhaps, in five hours, and when that engineer and fireman get to the end of that line we want them to be released automatically, if you please, and we want to prevent a growing tendency to call that man to go out to switch cars or do something else in order to get more work out of him, for which no compensation is paid.

The rule concerning "held away from home terminals" is as follows:

"Engineers and Firemen held at other than home terminal (including rest period) will be paid continuous time for all time so held, after the expiration of 15 hours from time relieved from previous duty, at the rate per hour paid for the last service performed; less than one hour not to be paid for."

It is contended that the foregoing rule should be awarded, because—

Engineers and fireman are required to incur extra living expenses when away from home, that should be compensated in the manner set forth in this rule.

Trips made with delay at distant terminal less than fifteen hours is estimated to cost from the wages of an engineer or fireman \$1.75, or approximately \$22.75 per month of twenty-six working days. This loss is not averted by the rule, but its application will avoid expense.

We have conceded that so far as the expense of the trip is concerned, made within reasonable time, we will say going today, staying all night at the other terminal, and coming back the next day, will cost out of the wages of engineers and firemen \$22.75 a month for living expenses. We are not protesting against the payment of that, but we are protesting that if they are detained any further, their time should begin and be continuous until they are started home again.

Railroads pay all expenses of shop employees and officials when absent from their homes, but have paid none of such expenses for engineers and firemen.

In other industries when agents or employees are assigned to service away from their homes liberal expenses are paid by the employer.

When engineers and firemen are held at other than home

terminals, their expenses not only continue but their earning power ceases.

The purpose of the railroads in holding engineers and firemen at distant terminals being to await full tonnage for trains, the profits of such practice make it possible for railroads to comply with this rule without financial loss.

The Chairman: About what does the incidental expense of an engineer amount to per day, do you think?

Mr. Carter: Why, it was estimated in one exhibit here that meals would have to be 35 cents apiece, to get a good meal, a meal that an engineer or fireman should have. That it would cost about 35 cents for each meal. It has been said, however, that it ranges from 25 cents to 50 cents. Now, the length of time away from home, of course, would require this additional expense.

The Chairman: I mean per day.

Mr. Carter: Well, I think it was estimated at \$1.75 per day.

The Chairman: I had forgotten. I know we had evidence upon that subject, but I had forgotten.

Mr. Carter: And the witness who presented that testimony gave it as his personal experience, his personal knowledge of that expense.

Now, under this "held away from terminal rule" that \$1.75 will not be avoided, but the amount additional, in addition to that, will be avoided. And it is not only the additional expense to which the engineers and firemen object, but their power to earn is decreased.

I have stated that the purpose of the railroads in holding these men away is simply to get full trains. Now, it is profitable to the railroads to hold the men there in order to get the full trains, and if they hold them ten hours additional and pay them continuous time for that ten hours additional, it would not amount to anything in comparison with what the earnings of the railroad would be by holding them for a full tonnage train.

In this same hearing when the Hours of Service Law was being discussed at the Congressional Committee hearing, Mr. H. T. Newcomb, counsel for the Delaware & Hudson Company, said (Employes' Exhibit 88, pp. 5-6), "Held away from home terminal is expensive and works hardship on employes."

Article 5. "Deadheading."

“Engineers and Firemen, deadheading on company business, shall be paid the same rate and on the same basis as the Engineer and Fireman on the train on which deadheading. Rules on individual schedules, governing minimum day, and other conditions to apply.”

It is contended that the foregoing rule should be awarded, because—

If the exigencies of a railroad's business required that engineers and firemen be sent from one point to another for the purpose of performing certain assigned duties, the burden of expense of such movements should be borne by the Railroad instead of by the engineer or fireman.

In practice, when engineers and firemen are deadheaded from one point to another on the railroad's business, such employes often are deprived of opportunities to earn full wages in other assignments.

The practice is to take the oldest extra man or the oldest man and send him to do this work. The man who is first out. When I say the oldest, I mean the man who is oldest on the extra board. Now, if he had not been called to make that extra trip it is possible that ten minutes later or fifteen minutes later he would have been called to make a trip where he could have earned the full wage, and his being called for the company's convenience to do this deadheading deprives him of the opportunity to make this full trip.

Personal living expenses of engineers and firemen are as great while deadheading as the expenses of the engineer and fireman operating the train on which the deadheading is done.

In wage agreements between Railroads and other employes, it is specifically provided that such employes, when sent out on the road, shall receive pay from the time for which they are called until they return and shall be paid overtime rates (time-and-one-half) for all overtime hours, whether waiting, traveling or working, and straight time for what are straight time hours at home station, whether waiting, traveling or working, and in addition thereto all expenses for meals and sleeping rooms when away from home.

The Chairman: Your theory is that he is giving his time to the railroad, and is therefore as much in the employ of the railroad as if he were working.

Mr. Carter: That is our contention. If a traveling man is selling goods, he is just as much in the employment of the house that manufactures and sells these goods, when he is traveling on the train as he is when he is actually soliciting the sale.

On many railroads, the same rates are now paid to engineers and firemen while deadheading as when operating the train.

I wish to read this note from Railroads' Exhibit 1, p. 290.

"More than 98 per cent of Railroads in Western Territory pay for deadheading on various bases, 7 per cent same rate as Engineer or Fireman on train."

And I quote from employes' witness DeGuire, page 7071:

"Other employes in Railroad service, when sent out on the road are paid full time and are allowed living expenses in addition thereto."

The Chairman: What is the rule in the East regarding the matter?

Mr. Carter: The eastern rule is time after 18 hours instead of 15 hours.

The Chairman: For deadheading?

Mr. Carter: I beg your pardon; I don't know what the eastern rule in regard to deadheading is.

The Chairman: What is it in the Southwest?

Mr. Carter: I don't think there is any rule. I don't think they have decided that question.

The Chairman: Well, it is immaterial.

Mr. Sheean: Each road provides its own deadhead rule.

Mr. Carter: I don't think there is any standard rule.

The Chairman: No standard rule?

Mr. Carter: No.

The Chairman: And you know nothing as to the individual?

Mr. Carter: No, I do not. I do know, however, that there are roads that do pay just the same as we are requesting here.

Article 10, with reference to hostlers. The rule is as follows:

"At points where an average of six or more locomotives are handled within twelve hours, day or night, Hostlers shall be maintained.

"Hostling positions shall be filled from the ranks of the

firemen, and they shall be paid \$3.35 per day of ten hours or less; provided, that where Hostlers are required to make main line movements, they shall be paid \$4.75 per day of ten hours or less, overtime in each case to be computed on the minute basis and paid for at the rate of time and one half.

“When such main line or road Hostlers are paid the same rate as engineers in switching service, such positions shall be filled from the ranks of the Engineers.

“Hostlers shall be allowed one hour for meals between the hours of 11:30 and 1:30, day or night. Hostlers will be assigned regular meal hour between the hours named or after being on duty five hours. Should Hostlers be required to remain on duty after designated meal hour, one hour will be allowed as overtime. No Hostler will be required to remain on duty longer than six hours without having one full hour for meals.”

It is contended that the foregoing rule should be awarded because—

Engineers and firemen while performing road service should not be required to act as Hostlers.

Engineers and firemen believe that at points where an average of six or more locomotives are handled in twelve hours, day or night, hostlers should be maintained.

The duties of road service of engineers and firemen are extremely arduous, and railroads should not require additional services of them.

Where railroads now compensate engineers and firemen for serving as hostler, in addition to their road duties, the reduction in expense to the railroads of relieving engineers and firemen of this work would offset the cost of a hostler at points where an average of six or more locomotives are handled within twelve hours.

Where railroads do not now compensate engineers and firemen for serving as hostlers in addition to their road duties, they should be relieved of that duty and hostlers employed to do hostlers' work.

Clerks in offices and mercantile establishments have long since been relieved of janitor's work, mechanics are no longer required to grind tools and clean the machinery they operate before and after they perform a day's labor, and the railroad

industry should be modernized in like manner by the employment of hostlers to care for locomotives when not in road service.

This rule permits a railroad at points where less than six or more locomotives are handled, to require the engineer and firemen to do all hostling, of course, with the understanding that they will be paid for that service in addition to the service of their road trip. They recognize that perhaps it would be cheaper for the railroads to pay the engineer and fireman to hostle their own engine after they reach the terminal than to place a hostler where there are one, two or three trains or engines delivered. But where there is an average of six or more locomotives handled within twelve hours, they contend that the railroads, without any expense to themselves, could put a hostler there, and by that relieve the railroad of paying the engineer and fireman for doing this work, and at the same time relieve the tired engine crew from doing the work.

Hostling positions should be filled from the ranks of the firemen, except when making main line movements, when only experienced engineers should be employed.

Now, you will understand that the peculiarity of firemen and engineers is that they are one and the same people for a considerable period in their lives. After a fireman is first promoted to the position of an engineer, he may be an engineer and a fireman backward and forward for a long series of years, on account of fluctuations in business, and we believe that one of those men should do the hostling when main line movements are made.

Except on railroads where the safety of property and lives has been subordinated to the money-saving policy of employing only the cheapest of unskilled labor, rules have been in effect for many years that forbid even firemen to be employed as hostlers until they have had specified periods of experience as firemen.

On practically all railroads, rules positively prohibit even a fireman handling an engine except by instructions of the engineer, and no man without experience as fireman or engineer should be permitted to act as hostler. It is inconsistent for a railroad, as a safety precaution, to forbid a fireman handling an engine while the engineer has charge of that engine, and then

permit an inexperienced person to handle an engine as hostler, where there is no engineer to supervise the work.

We submit that that rule and practice on many of the roads is inconsistent in the extreme. As a matter of safety, they say to the firemen through their rules, "You must not handle that engine when you are out with the engineer unless the engineer tells you to do it," but at the same time, they have a practice under which that engine is handled in large terminals, where a run-away engine would cause great damage, and handled by men who know little or nothing of the railroad business, less of engine work, and where there is no engineer to supervise and direct them. We submit that that is inconsistent.

A modern locomotive costs many thousands of dollars to build, and is a most complex machine, requiring experience and skill to properly manipulate. If railway officials, having no personal property interest in their preservation, elect to reduce the expense of their respective departments by employing incompetent or inexperienced persons as hostlers, the safety of the lives of the traveling public and of railway employes demands that such practice be prohibited.

Aside from accidents arising directly out of the handling of locomotives by incompetent persons, boiler explosions may result on the road from injuries to crown sheets and tubes, which injuries were caused by incompetent hostlers permitting water to get low while the engines were in their charge.

Where explosions do not result from such incompetence, serious defects may subsequently develop, and the responsibility and penalty for damage to boiler be placed on the engineer and fireman. This, if for no other reason, justifies the proposition that only skilled firemen and engineers be employed as hostlers. We respectfully submit that the employment by railroads of incompetent persons to fill so responsible a position as that of hostler, is inconsistent with the policy of "safety first" as publicly and persistently advocated by these same railroads.

Firemen and engineers should be given preference in the employment of hostlers by railroads.

Notwithstanding the rigid physical examinations to which firemen are subjected before employment by railroads, subsequent physical examinations of these same firemen, many of whom have become engineers, demonstrate that vision has be-

come weakened by the glaring heat of the firebox, that muscles and joints have become stiffened by physical overstrain and exposure to inclement weather, that advancing age has made it impossible for them to longer contend with the hardships of road service. This proposition requests that such employes be given preference over the man who has just reached Ellis Island, but is willing to accept any employment at any wage offered by the railroads. We submit that it is pharisaical and inconsistent for railroads to advertise their so-called "relief" and "pension" schemes and at the same time deny this request of employes who are the victims of the railway industry, denied further employment as engineers and firemen, but who are yet physically able to perform the duties of a hostler, which duties require experience, skill and technical knowledge more than great physical ability. That engineers and firemen should be loyal to the interests of the railroads is readily conceded. That railroads should not entirely disregard the interests of engineers and firemen, is here requested, when it is proposed that hostlers be taken from the ranks of firemen and engineers.

As no law, Federal or State, has yet prevented railroads from placing locomotives in the custody of persons not skilled in the technical knowledge of train operations, when such locomotives are operated upon the main line of railways, we respectfully submit that this Board of Arbitration should award the request that only engineers be employed as road hostlers and that they be paid the same rate as engineers in switching service. Railroads that have demonstrated their regard for safety of patrons and employes in this matter will not permit hostlers who are not qualified as engineers, to make main line movements.

The advance in rates of wages requested in the proposition for hostlers should in no manner deprive them of opportunity to eat one meal during each day's service, and this opportunity to eat should be presented at a reasonable hour. From 11:30 o'clock to 1:30, day or night, permits each railroad to assign any one hour in a period of two hours. The rule is sufficiently elastic to meet local conditions on any railroad.

Where hostlers are employed in day and night shifts the time specified in this rule for meals is reasonable, but where hostlers are required to begin work at other than the usual time,

after being on duty five hours they should be granted an hour for eating.

As laws are enforceable only by penalties, so rules for meal hours are enforceable only by penalties. Where railroads disregard the rule they should be required to pay for one hour's work not performed, which may result in the rule being applied.

No hostler should be required to remain on duty longer than six hours, without having one full hour for meals, and the rule should specifically so state.

The rate requested in this rule is equitable. Ten hours' work by a competent hostler, even though not qualified as an engineer, should be worth \$3.35 to a railroad. The rate per hour of 33½ cents is much less than is paid in other industries for labor less skilled and work less important. No engineer should be paid less than \$4.75 for ten hours' work, and none but men qualified as engineers should be permitted to serve as road hostlers. When an engineer works for 47½ cents an hour, a railroad is paying less for its skilled labor than other employers.

Hostlers should not be required to work more than ten hours per day.

It is as practical and less expensive for a railroad to relieve a hostler from work at the end of ten hours as it is for that same railroad to release a shop mechanic at the end of eight hours, which is the rule.

The only practical method of limiting a day's work is the usual method of paying time and one-half for overtime.

If the requirements of a railroad's business make it profitable to work hostlers overtime, the rate should be time and one-half.

For hostlers, as for all railway employes, all overtime should be paid on the minute basis.

I know of no class of employes where the same degree of skill, the same amount of experience should be essential, where the wages are so low as that of the locomotive hostler.

The citations appearing on pages 47 and 48 of the brief set forth the duties of hostlers, and in some instances the remarkably low wages now paid. It shows the conditions under which men have to eat their meals. For instance, Mr. McClory says, Mr. Nagel asked the question:

"During the twelve hours are you constantly employed?

“Mr. McClory: Yes, sir; sometimes I am eating a piece of lunch and have to run to an engine which has broke down, or an engine goes out, or a crew comes in off an engine, and I have to be on the job.”

That man should have an opportunity to eat. That man should not work over ten hours, and that man should have decent pay.

Article 11 refers to surprise tests, and the rule is as follows:

“That the practice of conducting surprise tests by turning switch lights and placing red lights, or flags, unaccompanied by torpedoes, beside track, or wiring down automatic signals to proceed position, be eliminated.”

It is contended that the foregoing proposition should be awarded, because—

The nervous shock, incidental to some of the so-called “efficiency tests,” or surprise tests, experienced by engineers and firemen subjected to such tests, are inimical to the interests of the traveling public, highly injurious to the mentality of engineers and firemen, and an economic loss to the railroads.

Men in charge of the operation of locomotives should have complete command of their mental faculties, if trains are to be transported safely. Men whose judgment has been warped by exposure to unreal but threatened danger, whose sense of caution has been dulled by the cry of “wolf” oft repeated, are not safe men to operate trains, and if the traveling public knew the facts, laws would be enacted to enforce this rule requested.

When an engineer and fireman are confronted by a seeming disaster—a misplaced switch or a collision—“they live a lifetime in a minute,” as has been aptly stated during this arbitration. That there is no real danger can not be known to them, in fact must not be known to them if the purpose of the test is to be accomplished. Possibly the train might be stopped before the apparent danger is reached, by an emergency application of the brakes, but after this is done the measuring of distance by the eye, in the darkness of the night, from the rapidly moving engine to what appears to be death, is not practicable. Presuming that neither the engineer nor fireman leaps from the engine, hoping to avoid being crushed in a derailment or collision, presume they stop the train before the point of threatened danger

is reached, the shock to the nervous system leaves its effects ever afterwards.

Just as a cruel driver may destroy the value of a horse by subjecting it to unusual punishment, or threatened punishment, so may a railway official, whose hobby is to "test" engineers and firemen with make-believe derailments and collisions, utterly unfit them for efficient service. As some railroads cannot distinguish between proper efficiency tests and dangerous surprise tests we request the awarding of this rule.

Article 12 relates to assistance for firemen, and the rule is:

"On all locomotives in freight service where but one fireman is employed, and on all locomotives in passenger service, coal will be kept where it can be reached by the fireman from the deck of the locomotive. Coal of the proper size for firing purposes will be placed on all tenders.

It is contended that the foregoing rule should be awarded because—

With the increased size of locomotives, with the increased tonnage of freight trains and with the increased weight and speed of passenger trains, tenders of greater capacity have been placed in service, with the result that much of the coal burned in a locomotive is handled twice by the firemen.

The manner of keeping coal within reach of the fireman is not prescribed. On some railroads where this service is rendered, mechanical coal pushers have been installed, and by their operation the coal is forced forward at the will of the fireman, and in a manner that makes it unnecessary for him to shovel the coal ahead before again shoveling it into the firebox. On other railroads, men especially employed for the purpose are required to go back and forth on locomotives between certain points, shoveling coal from the back end of the tenders to the front. On other railroads, men are placed at certain points who shovel coal forward on all engines passing that point. On other railroads, coaling stations are maintained at short intervals so that coal can be taken as often as necessary to avoid the necessity of shoveling the coal twice. On many railroads, this work is still required of firemen, and the rule should be awarded.

On many railroads, long before the large tenders of today were built, rules were conceded to firemen that coal would be broken to proper size for firing, and on some railroads these

rules are enforced. To secure a uniformity of the rule and to lend the prestige of a Federal Arbitration to its enforcement, we ask that this rule of the proposition be included in the award. Coal could be broken to proper size for firing at coaling stations before it is delivered to the locomotives at no great expense to the railroads, and thus afford relief for the overworked fireman. Seldom has a fireman the time to properly break coal, and it is well known to railway officials that the expense of breaking coal to proper size for firing is saved in the more economic combustion of that fuel.

I might say that I have failed to read any text-book upon the subject of combustion that does not insist that the coal be broken to the proper size for firing, and without referring to the exact percentage of waste, I am quite sure that I am stating the facts when I say that coal properly broken to the proper size effects so much more sufficient combustion of that coal that it would actually save the labor of breaking that coal before it is placed on the locomotive.

Mr. Robert Quayle is the superintendent of motive power of the Chicago & North Western Railway, and I believe he is considered to be one of the leading railway mechanical authorities of the country. He is quoted by the *Railway Age Gazette* as saying: "Robert Quayle, Superintendent of Motive Power, Chicago & North Western Railway, mentioned the possibilities of increasing the thermal efficiency of locomotives. He agreed that the large grate area was more efficient for burning coal as suggested in Dr. Goss' paper of last year. Particular stress was laid on the proper preparation of the coal for the locomotive, and of assisting the fireman as much as possible, in the performance of his work."

Robert Collett, President of the International Railway Fuel Association, is quoted as saying: "Fuel should be properly prepared for delivery to the engine tender and a uniform grade of fuel should be supplied, where possible."

While it would add perceptibly to the number of men employed on the coal chutes or at a coaling station to properly break coal, the additional expense of breaking the coal would be far more than offset in the efficient combustion of that coal, and has been so decided by practically every technical expert upon the subject.

Article 13, Two Firemen:

“On coal-burning locomotives weighing 185,000 pounds or more on drivers, when used in freight service, two firemen will be employed.”

That the physical requirements for properly firing a large locomotive are beyond the capacity of one man is conceded by practically all whose personal observation has given them a knowledge of the subject.

While, in arbitrations, certain witnesses for the railroads always testify that firemen perform little or no physical labor, such testimony is unworthy of serious consideration. In the discussion of this problem by railway officials at their technical conferences, no attempt is made to conceal the fact that the work is greater than the capacity of one man, if the locomotive burns the amount of coal necessary to maintain its highest efficiency.

Vast sums of money have been expended by railroads during the last ten years in the development of mechanical stokers, most of which, after having given promise of success, proved impracticable because of the great expense of maintenance. Experiments with these mechanical stokers have demonstrated that it is not only the human machine that breaks down under the trying ordeal of successfully firing a large locomotive. The wear and tear on the human fireman is far less expensive to the railroads than the constant repairs and renewals of parts of the mechanical stoker. New candidates for favor are now in the field of mechanical stokers, and are reported just as perfect in their operation as other stokers that have been discarded, stokers that once were reported to have been perfect. The sole reason for the persistent efforts to perfect an economical mechanical stoker, and so stated by technical experts, is that one fireman can not shovel coal fast enough, when most coal is most required, to evaporate the amount of water necessary to maintain the locomotive at its highest efficiency.

The mechanical stoker costing too much to instal and maintain, as is made evident by a refusal of railroads to place them in service in any considerable number, and the work being more arduous than one man can perform, we respectfully submit that this Board of Arbitration should decide in their award that two firemen be employed on all coal burning locomotives weighing 185,000 pounds or more on drivers, when used in freight service.

Pardon me for reading some of my citations. "Railway and Locomotive Engineering" is the leading railway and locomotive engineering publication of the country, if not of the world. It restricts its work to the locomotive. It has but little to do with the operation of railroads. It has nothing to do with railroad finance. It devotes its entire space and the entire time of its editorial writers to the question of locomotive operation and efficiency.

The "Railway and Locomotive Engineering" says:

"Locomotive firemen are, physically, the hardest worked men in railway service. We believe the day will come when mechanical engineers will look back with amazement upon the conditions which required firemen to toil like beasts of burden maintaining steam, when power was at hand to perform the work mechanically."

A committee of the Traveling Engineers' Association reported as follows:

"I dare say the standard locomotive on most roads would be fifty tons lighter if it had been foreseen that these 'perfect stoker' was not at the threshold. The power of the present day is breaking down the fireman before he is fitted to assume the more responsible duties at the throttle."

Mr. G. W. O'Neill, of the New York, Ontario & Western, who is a traveling engineer there, says:

"Speaking of the laborious work that the firemen have to do today on the heavy power, hauling heavy trains, I believe we must, sooner or later, resort to something else besides hand firing."

Mr. A. H. Armstrong, Assistant Engineer of the Railway Department of the General Electric Company, says' in the Railway Age Gazette for January 2, 1914:

"Even with boilers of modern construction, with their economical use of fuel, the still growing demand for locomotives of greater capacity has called for a crew of two firemen or the use of mechanical stokers in order to burn coal at the rate required. * * * The increased hauling capacity of the heavy Mallet was secured at the expense of speed on the ruling grade, due to the limitations of one man throwing coal."

Again, I shall quote from the Railway and Locomotive Engineering, which publication says:

“Locomotives have been increasing in power every year until the question of firing the huge boilers to maintain the required pressure of steam has become too great for human muscle and endurance.”

The same publication, in another issue, says:

“The limit of human endurance in shovel firing has surely been reached.”

Employes' witness White, while on the stand, testified that twenty-eight to thirty tons of coal were burned between Chicago and Galesburg on the Chicago, Burlington & Quincy Railroad.

By the increased efficiency of the locomotive when two firemen are employed, the expense of the second fireman would be more than offset.

In official tests it has been demonstrated that the cost to the railroads of firemen per ton mile is less with two firemen than with one fireman, or with a mechanical stoker.

I think I shall read that citation now. Mr. G. R. Henderson, Mechanical Engineer, before the Railway Master Mechanics' Association, reported a specific test that had been made. The test appears in the official proceedings. This is the quotation:

“The locomotive upon which our figures were based was of the Mallet type, having a tractive force of 65,000 pounds, which would enable it to haul at slow speeds 4,200 tons up the one-half per cent grade track on which four figures were made, ascending the grade at six, ten and fifteen miles per hour, and it was assumed that one fireman could handle 3,000 to 4,000 pounds per hour throughout the forty miles up grade, or that two men, by working in relays, would be needed to supply 6,000 to 8,000 pounds per hour, but for quantities over this a mechanical stoker would be necessary. As the grate area of this locomotive is 78 square feet, it will be seen at once that it would be possible to burn from 12,000 to 15,000 pounds of coal per hour if found desirable or necessary. * * * These figures, therefore, enable one to see at a glance the variation in cost and capacity due to one or two firemen, or to a mechanical stoker.

“It is seen, therefore, that by far the greatest amount of work done by the engine is with the use of a stoker, and running up hill at a speed of fifteen miles per hour, the assumption being in this case that there would be 15,000 pounds of coal burned per

hour while running up the grade. The cost per 1,000 ton-miles is less than if we attempted to run with one-half the road at the same speed up hill with only one fireman, and it is only 3 cents greater than if we went up the hill at six miles an hour with a single fireman. At ten miles an hour, two firemen would give very nearly the same capacity of the locomotive and at somewhat lower cost.

“The advantage of being able to push the engine to its full capacity and at a fairly high speed, is shown without any uncertainty.”

Again I want to repeat, in official tests it has been demonstrated that the cost to the railroads of firemen per ton mile is less with two firemen than with one fireman, or with a mechanical stoker.

At a freight rate of one cent per ton per mile, one 40-ton car of freight added to a train where a second fireman is employed will produce additional revenue for the railroad sufficient to pay three times the entire wages of the engineer and both firemen.

The greater efficiency of a locomotive fired by two firemen will probably increase the speed of the train sufficient to avoid payment of overtime to the entire engine and train crew to the extent, on many trips, of offsetting the wages of the second fireman.

Tie-ups under the Federal Hours of Service Act, and violations of that law, would, in many instances, be avoided by the employment of two firemen, who could maintain the locomotive at its highest steam pressure at all times and thereby increase the speed. Often the lack of but a few minutes to reach another passing track before a superior train is due at that siding, results in hours of delay.

I will not read any more of the citations.

Firemen and engineers agree that to oppose the introduction of larger locomotives would be improper from an economic viewpoint. They appreciate the fact that the larger the locomotive the greater the tonnage of the train and consequent earnings of the railroads.

Firemen agree that they should fire these huge locomotives to the extent of their physical welfare, but, having gone to this

extent, the railroads should not shirk a moral obligation that rests upon them.

It is unfair that railroads should withhold the assistance of a second fireman, when, by so doing, the exhausted condition of the one fireman necessitates his laying off for recuperation, and thereby losing the earnings of a day or trip.

The theory advanced by the railroads that the introduction of superheating devices is a factor in the fixing of wage rates for firemen is not practical. While it is conceded that a perfect working superheater reduces the amount of coal burned in transporting the same tonnage, in practice, the tonnage is increased instead of the coal saved.

Superheating devices require constant and careful attention of boiler makers to maintain their efficiency, and in practice this is not always done, with the result that instead of being a relief to the firemen, they actually add to their labors, because of development of leaking joints, obstructed tubes and other ailments to which superheating devices are subject.

Where steam superheating devices have been properly maintained, the tonnage of trains has been increased to the extent that past wage increases have been offset by increased earnings. This feature of superheater practice should tend to increase rather than decrease rates of wages of firemen.

That is a very important statement, and I want to read from the *Railway Age Gazette*, to sustain that statement:

“Inquiry as to the means by which the increased cost of labor employed in train movement was partially, or wholly, or even more than wholly, offset on the various lines, has elicited the information that an extensive adoption of superheaters on the locomotives of the system has made possible a large increase in capacity per locomotive, making it practicable to haul additional cars per train at proportionately lower cost, and with a large saving in engine mileage, which was also appreciably affected by the reduced need for double headers.”

There is no question, gentlemen, that the superheaters on some railroads have been so economical and have increased the tonnage rating of engines to the extent that the increased earnings to the railroads of those locomotives have wholly or more

than wholly offset the increases of all the engine crews in the last wage movement. There is no question of it.

In no other steam plant has the employer required one fireman to perform the work, regardless of the power generated. As the size of the steam vessel increases, so does the number of firemen and engineers employed.

It is common practice of railroads to employ a second engineer and fireman on a second engine, when a train is too heavy for one engine to pull at the speed required. In passenger service the addition of a single coach or sleeper sometimes necessitates the use of another engine and crew as helper. In the same manner, there is a point in physical effort beyond which one fireman should not be required to go, and that point is fixed in the proposition at locomotives less than 185,000 pounds on drivers. It is as reasonable for firemen to request that a limit be fixed beyond which two firemen will be employed, as it is for the railroads to add another engine and crew to a train when the capacity of one locomotive is reached.

Upon the presumption that the substance of this rule will be avoided, the Board of Arbitration is urged to not refer to another Board of Arbitration the question of when the award of this Arbitration should be applied, as was done on a former occasion.

I am going to read some quotations. Mr. DeVoy, Assistant Superintendent of motive power of the Milwaukee Railroad, said, at a meeting of the Railway Master Mechanics' Association:

"Another very interesting feature shown by the dynometer car, which accompanies the test at all times, was that we were able to haul from 150 to 300 tons more freight with the superheater engine than we were with the non-superheater engine, so I think the results obtained bear out the statements expressed in the Purdue University paper."

The report of the Committee on Mechanical Stokers, American Railway Master Mechanics' Association for 1912, says:

"As the greater sustained tractive efforts of the large engine equipped with superheaters and brick arches, is gradually taken advantage of, its fuel consumption per hour will increase, though decreasing on the ton mile basis."

Railway and Locomotive Engineering says, about superheaters:

“Within the last year we have heard remarks made to the effect that the general introduction of steam superheaters will reduce the fireman’s work to such an extent that mechanical stokers will no longer be necessary, but we regard that as a mistaken view, for the increasing capacity of locomotives is likely to hold good the necessity of doing the heavy drudgery of firing by mechanical means.”

Employes’ counsel, Mr. Stone, reading from an official description of locomotives, of the Great Northern Railroad, on page 4346, read the following concerning the Great Northern’s blue print, their official description:

“Take their F-8 class, of which they have quite a number. They were originally 20x32, with a steam pressure of 210 pounds, a tractive effort of 39,090 pounds; they have been superheated, given cylinders 26x32, the steam pressure reduced to 160 pounds, and their tractive effort is now 53,000 pounds, an increase of 41 per cent.”

The committee report of the Master Mechanics’ Association says:

“Superheaters make it possible to get a higher sustained tractive power out of a locomotive. The savings resulting from their use, therefore, would not show upon a locomotive mileage basis, but would appear when figured on a ton mile basis, which is, to a certain extent, proportional to the work done.”

We agree and have always agreed that the installation of the superheater has greatly reduced the amount of coal per ton mile, but it has not reduced the amount of coal per engine mile or per train mile, and that is the mile that measures the fireman’s work.

Employes’ Witness White testified that superheaters are hard to fire.

Employes’ Witness Vance testified that firemen prefer the saturated engines to superheated engines on the Central Division of the Illinois Central Railroad.

Mr. W. G. Tawse, who is a representative of the Locomotive Superheater Company, said at the Traveling Engineers’ Association, with regard to superheater engines:

“If they fail to keep the flues clean, allowing them to stop up with honeycomb and cinders, so that they burn three or four tons of coal more than they should, the object of the investment

has been defeated and the engine is in reality not so good as a saturated steam engine in first-class condition.

Now we will read what another very prominent railroad official said as to how they are kept up. Mr. W. C. Hayes, Superintendent of Locomotive Operations of the Erie, said at the Traveling Engineers' Association in 1913:

"It was recently my privilege to visit the shops of a large trunk line railroad in the East, and also while there to make an examination of about 15 sets of superheat tube units and headers with engines in the shop for general repairs. Almost all of the return bends of the superheat tube were encrusted over with about an inch of hard clinker extending out about two and one-half inches."

That is the testimony of railroad officials, not of employees' witnesses.

Mr. J. W. Hardy, representing the Rock Island road at the Traveling Engineers' Convention in 1906, said:

"Where you have the superheater encased in superheater tubes a condition exists there that makes it possible to do a great deal more damage than if you had a saturated steam engine, because the superheater units with their supports are in there in such a way that they are ready to catch some of this stuff."

We knew in the beginning of this Arbitration hearing that the Railroads would endeavor to prove that the work of the firemen had been reduced by the introduction of the superheater. They could not convince men highly skilled in railroad technical mechanics, but they recognized that possibly some members of the Board were not highly skilled in railway mechanics, and therefore it appeared that when they showed that there was an actual reduction per ton mile in the coal burned the impression might be created that there was a reduction in the coal burned per train mile or engine mile.

We conceded—I think I myself did as the third witness on the stand—that with the same tonnage and the same engine the superheater does save coal. We contended then, and we have proved since, as just stated by authorities other than our own, that instead of saving coal they had added to the tonnage haul and thereby increased the revenue enough to pay for all the coal and all the wages on the entire train. And as said by the Railway Age Gazette, they have wholly and more than

wholly offset the entire wage increase of the last wage movement. So that is all we have to say on the superheater. We will hear from the other side.

Article 14 refers to cleaning of locomotives, setting up wedges, filling grease cups and cleaning headlights, and the placing of supplies on locomotives.

The rule is:

“On Railroads where firemen are required to clean locomotives, they shall be relieved of such service.

“Where Engineers and Firemen are required to set up wedges, fill grease cups, or clean headlights, they shall be relieved of such service at all points where roundhouse, or shop force, or an engine watchman is employed.

“Where Engineers and Firemen are required to place on or remove tools or supplies from locomotives, fill lubricators, flange oilers, headlights, markers or other lamps, they shall be relieved of such service at all points where roundhouse, shop force, or an engine watchman is employed.”

The cleaning of engines is not a fireman's work.

Railroads never paid firemen for cleaning engines, and insisted on their performing this work only because firemen could be coerced into cleaning engines without compensation therefor.

During all the years firemen were coerced into cleaning engines they never were compensated a penny for it. I have used the word “coerced” advisedly because they were told “If you don't clean that engine, take your time”; and a man with a family will put up with a great deal before he will see them want for something to eat. That was coercion pure and simple, and they never at any time have offered one cent of compensation.

In the Western firemen's concerted wage movement of 1907, an agreement was reached with the Railroads that firemen would no longer be required to perform this work. Many of the Railroads had of their own volition abandoned this abuse years before. Now, to avoid a revival of this practice and to make the rule uniform on all railroads it is urged that this rule be made a part of the award.

Engineers and firemen should not be required to set up wedges, fill grease cups, or clean headlights, where the Railroads maintain roundhouse or shop force or where a watchman is

employed. The setting up of wedges is a machinists' work, and should be done by a machinist.

Filling grease cups and cleaning headlights should be done by roundhouse employes while engineers and firemen are securing rest from their previous trip or day's work.

Many railroads have abandoned practice of compelling engineers and firemen to do this work.

Engineers and firemen should not be required to place on or remove supplies from locomotives, or to fill lubricators, flange oilers, headlights, markers or other lamps, where roundhouse or shop force, or a watchman is employed.

Railroads should provide a complete set of necessary tools for every engine instead of requiring engineers and firemen to carry them back and forward between tool rooms and engines. If sufficient tools are not available to properly equip all locomotives in service, others than engineers and firemen should be assigned the duty of shifting them.

The filling of lubricators can best be done when engine is not in service. On the road, with high steam pressure, and sometimes leaking steam valves, the hot oil is often blown over the roof of the cab, much to the danger and discomfort of the engineers and firemen.

Pardon me for digressing. I would like to have the members of the Board understand why it is more difficult to fill a lubricator while a locomotive is under steam.

A lubricator is a receptacle for oil for lubricating purposes. It is connected with the boiler at high steam pressure with a feed pipe bringing the high steam pressure into this receptacle for oil. As soon as the steam reaches the lubricator or the oil, the steam is condensed, forming a body of water. The oil being of lighter specific gravity and the water being of greater specific gravity, the water sinks to the bottom of the lubricator, but the whole boiler pressure is there. This pressure forces the oil over through the feeding valves, regulated by a small needle point valve, into the steam chest. Now, when the lubricator has to be filled on the road, the valve connecting it with the dome or with the boiler pressure is shut off, but as is often the case, there is a minute leak left. The result is that even though the lubricator be properly drained, after the plug is removed there is sometimes an explosion, and the heated oil, at the same tem-

perature as the boiler, is blown over the cab and into the faces of the fireman and engineer.

We contend that when the engineer and fireman are resting, while they have finished one trip and before they begin another, at places where roundhouse or shop forces are kept, or where there are watchmen maintained, that work should be done by that class of employes.

They do not hesitate to fill these lubricators should they become empty on the road, nor do they ask relief from same. They do ask, however, that when they are attempting to take their rest between trips, that that class of work be done where the railroads have employes already employed who could do that class of work.

Flange oilers, headlights, markers and other lamps should be filled when engines are not on road, and by men employed for that purpose.

Many railroads have long since abandoned the practice of requiring engineers and firemen to do the work named in this rule, and if engineers and firemen were now compensated for this service no railroad would require it to be done by them; therefore the entire rule should be made a part of the Award.

Understand gentlemen, that the only reason that engineers and firemen are required to do this now is because they can have it done without it costing anything. The engineers and firemen can be required to do this work without compensation. Therefore it is cheaper to do that than hiring the cheapest roundhouse man to do the work while the engineer and fireman are taking their rest.

The fact of the matter is as was stated by employes' witness Moore, page 125:

"Few Railroads require Engineers or Firemen to place on or remove tools and supplies from engines, fill lubricators, etc."

Article 15 "Official record of weights on drivers."

"For the purpose of recording weights on drivers, each railroad, parties to this agreement, will permanently post bulletins at all terminals, showing accurate service-weights of all locomotives."

It is contended that this rule should be awarded, because:

A failure to publish for the information of all engineers and firemen an official record of the accurate service-weights, on

drivers, of all locomotives will result in abuses and dispute as to proper payments for services rendered by engineers and firemen.

The correct weights of each locomotive on drivers should have been reported to the railroads by the builders and the additional weight of coal and water, etc., should be determined by test, and when the total weight on drivers of each locomotive is thus determined the information should be bulletined.

I doubt whether the railroads would seriously oppose any such proposition. It would be for the benefit of every subordinate official to know what rate of wages for each engineer and fireman each locomotive would carry.

Article 16: "Throwing switches and flagging."

"Engineers and firemen will not be required to throw switches, flag through blocks, or fill water cars."

It is contended that this rule should be awarded, because:

It is unfair that brakemen and switchmen should be displaced by railroads for economic reasons and then require engineers and firemen to perform the work of brakemen and switchmen.

Brakemen have sought the restoration of the third man on freight trains, because of the hazard and additional labor of operating a modern tonnage train with but two men. Railroads have opposed the employment of this additional brakeman, and some railroads have insisted that engineers and firemen do the work of brakemen.

There should be a sufficient number of switchmen and brakemen employed to throw switches and flag through blocks, for firemen are required by the rules of all railroads to assist the engineer in engine duties and to carefully watch for signals. This cannot be done with the fireman off the engine performing brakemen's or switchmen's duties.

Firemen are clothed especially for the hot work of firing locomotives and usually their clothing is saturated with perspiration. To require firemen in this condition to go out in zero weather to do brakemen's and switchmen's work should be prohibited by the Award.

The witness Bremerman said this in effect, and I am not quoting exactly: "The practice of not requiring Engineers and Firemen to throw switches or flag through blocks is established."

There are only some roads that require this work, and we

ask this Arbitration Board to establish a rule so that the practice will not grow, so that they will not take off another brakeman, and have the fireman and engineer do the other brakeman's work.

The next chapter of this argument is entitled, "Earning possibilities under existing rates and rules."

In the opening statement to this Board of Arbitration, Counsel for the Railroads based his opposition to the Proposition here submitted for decision upon the earning possibilities of some Engineers and Firemen under the existing rates and rules, contenting himself with the assertion that "the present rates of pay and compensatory rules, as applied on the different Railroads involved in this movement are full, fair and adequate." In support of this line of defense the Railroads have concentrated their efforts, presenting statistical statements and testimony of witnesses that demonstrate conclusively that it is possible for Engineers and Firemen, by working from twelve to sixteen hours every day, to earn far more in a month or a year than employes in other industries can earn for the same period of time when working eight hours per day and on only the usual working days, excluding Sundays and holidays.

It was conceded by the Engineers and Firemen in the early testimony and documentary evidence submitted by them that under the piece-work and seniority systems, long in effect, a comparatively few of their fellow workmen could, by great physical effort and continuous employment, add to their earnings in a marked degree.

There being but slight difference of opinion between the Railroads and the Enginemen on this point, the real contest has been the efforts of the Railroads to convince the Board of Arbitration that these exceptionally high earnings are typical of the earnings of all Engineers and Firemen under the existing rates of wages and compensatory rules. If the Railroads could create the impression that all Engineers and Firemen earn as much as some Engineers and Firemen occasionally earn, it was evidently anticipated by the Railroads that a victory would be won, the Proposition defeated, and the old order of things continued.

In denial that the earnings of the few are typical of the earnings of all, or the earnings for October, 1913, are typical of earnings for other months, the following is submitted:

Under the piece-work system, combined with the seniority system, the Engineers and Firemen longest in service are enabled to earn in a given month or year far more than their fellow workers who are juniors in the service.

Wages of Locomotive Engineers and Firemen employed in road service are based upon certain rates per hundred miles traveled by the locomotive they operate, consequently, the higher the speed of the train the greater the opportunity to add to earnings in a given time. There being no limitation to the number of hours worked in one trip, or a series of trips, so long as the "sixteen-hour law" is not openly violated, those with the greatest physical capacity are able to make many miles, or complete many "pieces," under this piece-work system within one month's time, and the earnings of these few is one of the principal supports on which the Railroads rest their case.

The opposition to the piece-work system by workers in other industries has been the result of this unfair attitude of employers. In the Homestead strike of 1892 the mill owners defended their methods of defeating their former employes by asserting that under the piece-work system then in practice a certain gang leader had earned \$16 in one day. The fact that under that same system a great majority of the workers earned but a bare subsistence was unknown to the public.

In all piece-work systems of compensating workers, after a rate per piece is established, more work per piece is exacted, and a contest continues between the worker, who seeks to increase the compensation per piece, and the employer, who exacts more and more service per piece. So it has been with Engineers and Firemen, a constant struggle to have rates per mile keep pace with work exacted per mile. Trains in Freight service formerly were operated at comparatively high speed, under the theory of Railroads then popular, that prompt service brought business. Since then managerial efficiency has demonstrated that speed is a negligible factor; that the greatest number of tons of freight that can be transported by one Engineer and one Fireman is an economic masterpiece. To compensate in some degree this loss of earning power per 100 miles, existing rules provide on ten-hour Railroads that when the speed of the train falls below an average of ten miles per hour the Engineers and Firemen will receive the same compensation for six minutes of

time on duty as is paid for one mile traveled; thus Engineers and Firemen on such Railroads receive a "day's" pay for "100 miles or less, ten hours or less."

This transformation of wage basis from miles to hours has deprived the physical enthusiast of opportunity to make many miles, but has left to him the privilege of working 16 hours every day, and if he has been in the service long enough to escape the effect of seasonal fluctuations in railway business, he is privileged to work every day in the year, and thereby find his name among the notables submitted by the Railroads in this Arbitration as their principal reason why the thousands of other Engineers and Firemen whose earnings are comparatively low, should not receive recognition by this Board of Arbitration.

To accomplish their purpose of demonstrating "that the present rates of pay and compensatory rules are full and adequate" the Railroads have based their computations and estimates of expense of complying with the Proposition, upon the payrolls of Engineers and Firemen for the month of October, 1913, the month in which the Railroads' business was the greatest in the Railroads' history. If it could be shown that a majority of Engineers and Firemen received comparatively large pay checks in October, 1913, the Railroads presumed their contentions to have been sustained. That each of a majority of these Engineers and Firemen did two men's work and thereby earned two men's pay in October, 1913, many of whom earned less than half as much in other months of the same fiscal year, was overlooked in the statements of the Railroads until attention was called to these facts.

The rate of wages per hour is the true index to the earnings of all Engineers and Firemen in Switching Service, of a majority of Engineers and Firemen in Through and Local Freight Service, and of all Hostlers. The fact that some men are physically able to average fourteen hours of work every day should be given no consideration in determining an equitable rate per hour. The fact that in October, 1913, the business of Railroads was so great that a majority of the men were required to work a greater number of hours than in any other month in the history of Railroads is no reason why the rates of wages per hour for Engineers and Firemen should be exceedingly low.

Compared with the average rates of wages of employes in

other industries, Locomotive Engineers in Freight Service rank below fifteen leading trades. Engineers in Switching Service in the City of Chicago work for forty-two and one-half cents per hour, where Hod Carriers are paid forty-eight cents an hour and skilled workers in other trades are paid from sixty-five cents to seventy-five cents an hour.

In a statement of average wages per hour in seventeen Western Cities, for the year 1913, for forty-six trades the wage of Locomotive Firemen in Freight Service ranks thirty-eighth, lower than helpers and laborers in some industries. In the City of Chicago a Locomotive Fireman in Switching Service receives twenty-five cents per hour for his services, while the Hod Carrier in the same city is paid forty-eight cents per hour.

Locomotive Hostlers employed by one of the most important and prosperous of Western Railroads are required to work twelve hours per day at twenty-five cents per hour.

As stated on one former occasion, and as quoted very repeatedly by counsel for the Railroads in his brief and as has been said in a statement sent out by the publicity representative, the Chairman of the Conference Committee of Managers this morning, I am quoted as saying that our case is lost if the Railroads have succeeded in proving what is not true is true. Here is a statement sent out over the signature of the Conference Committee of Managers which bears the date of March 29, and begins this way:

“‘I have reached the conclusion that our case is lost if we treat the exhibits of the Railroads too seriously.’”

“‘This admission by W. S. Carter, President of the Brotherhood of Locomotive Firemen and Enginemen, before the Federal Board of Arbitration, was the climax of the brief filed today by James M. Shecan, attorney for the Western Railroads,’” etc. And it closes as follows:

“‘I have reached the conclusion that our case is lost if we treat the exhibits of the Railroads too seriously.’”

My attention has been called to the fact that in the brief of the Railroads that is repeated.

The Chairman: What is that document you are reading from?

Mr. Carter: Oh, it is simply a publicity matter saying that I confessed that our case is lost. I want to say here that the

case of any employes is lost in any arbitration if the statements of the railroads are believed by the Arbitration Board. It is from our knowledge of the fact that the Arbitration Board cannot believe their statements that we say our case is not lost. We know that that which was tried to be put over has not been put over.

In a statement of average wages per hour in 17 western cities for the year 1913 for 46 trades the wages of locomotive firemen in freight service rank 38th.

By referring to page 10 of Employes' Exhibit 5, you will note the average rate of wages per hour in 17 western cities. You will find that the average of all locomotive firemen in freight service is \$52.91, and it ranks 16th on that list. Locomotive firemen \$33.85, that is freight service firemen, and their rank is 38th. The wages of engineers, firemen and hostlers, when you take the wage per hour, are so much lower than wages of other skilled employes in other lines of service that it seems a shame that railroads should even pretend that they pay their employes high wages. It seems unfair that they should refuse to pay time and one-half for overtime, when they can force their employes to work 16 hours, and thereby show high earnings. Just give us time and one-half for overtime in yard service after ten hours, and in the next arbitration I will promise you they won't show any 16-hour men, the men will all be 10-hour men. After the ten hours they will put another crew on, and the men will have to content themselves with the wages paid for ten hours instead of sixteen. If we could get time and one-half for Sundays and holidays, as they get in other skilled trades, I will guarantee you that the wages of the engineers and firemen will not amount to as much in the aggregate as employes in other industries where the wages are higher.

I want to read to you a citation from statement of D. Willard, Vice-President of the C., B. & Q. Railroad, which was made before the Congressional Committee:

"Cheap transportation means carrying as large a load as is proper and consistent with good policy. . . . Ten miles an hour, including all stops and ordinary delays, is an economical speed for freight trains—and I think that is in accordance with the practice of most roads."

Employes' Exhibit 5, page 2; Railroads' Witness Keefe,

page 3820, and in the testimony of Employes' Witness Carter, it is shown that the piecework and seniority system is responsible for high earnings of a few engineers and firemen.

In Employes' Exhibit 85, the earnings of engineers and firemen for month of October, 1913, compared with earnings of other months for same fiscal year, are made, and I earnestly request that Employes' Exhibit be carefully studied in considering what the earnings of these high-paid men are.

Employes' Exhibit 5 shows the rates of wages per hour and earnings for continuous service of engineers in switching service on Western Railroads: And so on down.

We contend that it is not fair to say that engineers and firemen are highly paid, when the basis of that statement is the long hours they have to work. If, in any of these callings—if, for example, the machinists on the Milwaukee road worked their 16 hours and they would get their pay for the first 8 hours as a full day's pay and for the next 8 hours they would get a day and a half's pay, they would get two days and one half's pay for the 16 hours' work, while engineers and firemen get 1.6 day's pay for 16 hours' work. It is unfair to the engineers and firemen to present earnings made under such conditions, and then say that their rates of wages are high. Whenever this Board allows time and one-half for overtime you will find that instead of requiring one switch engineer to work 16 hours, they will have two switch engineers working 20 hours; that is, they will have two crews.

The next section of the argument is upon the economic effect of the increased cost of living.

When it is conceded by the Railroads in this Arbitration that the rate of wages of firemen on the same class of engines has been advanced only forty cents a day in twenty-six years, the economic effect of the increase in cost of living upon the fireman's existence is obvious. While the wage advance to engineers has been a few cents more per day during a similar period, his wage has not kept pace with his living expenses. We respectfully submit that this increase in cost of living should be given serious consideration by this Board of Arbitration in formulating its Award.

Approximately ten per cent increase in wages, in the aggregate, was secured by engineers and firemen in the wage adjust-

ments of 1910. Firemen in passenger service and on oil-burning engines were advanced but fifteen cents a day, which advance was granted entirely on account of the increase in cost of living shown to have developed during the period ending with 1909. During the four-year period ending with 1913, a special investigation demonstrates that the cost of living of engineers, firemen and hostlers has increased not much less than \$100 per year, since their last wage increase. In reaching this estimate, prices of articles during the winter of 1913-14 were the last investigated, and no part of the period included in the present European War was considered.

The purchasing power of a day's wage is of far greater economic importance to the worker in any industry than is the rate of wage. Engineers and firemen have learned from years of experience that when wage increases have been conceded by Railroads such advances in compensation have already been absorbed by the increase in the prices of meat, groceries, rent, meals and rooms away from home, and other items of living expenses.

I want to read a few of the citations, and to say that I have taken the liberty of citing some authorities that have not been included in the evidence presented.

We had the evidence prepared. We had much that we would have liked to present in rebuttal, but our judgment led us to believe that we had presented enough rebuttal when we quit. Much matter was in type that was never used. I will quote from some of it, with the pleasure of the Board. The fact that I quote only from leading authorities, recognized as such, and from governmental hearings, perhaps will give it some value.

Henry Pratt Fairchild, in an article entitled: "A Sociological View of the High Cost of Living," published in the Forum for July, 1914, says:

"The more efficient the means of production become, the smaller will be the proportion of all productive effort which is devoted to the creation of necessities. The cost of living will always be high."

Mr. I. M. Rubinow, President of the American Statistical Association, in an article entitled "Trend in Real Wages," pub-

lished in the American Economic Review for December, 1914, says:

“That the loss of real wages within the last five years was about 7 or 8 per cent, and within the last twelve years, some 10 per cent.

“In years of falling or even slowing rising prices, the American wage worker was able to hold his own or to improve his condition to a slight extent. But when confronted with a rapidly rising price movement, the American wage worker, notwithstanding his strenuous efforts to adjust wages to these new price conditions, notwithstanding all his strikes, boycotts, and riots, notwithstanding all the picturesque I. W. Wism, New Unionism and the modish sabotage, has been losing surely and not even slowly, so that the sum total of economic progress of this country for the last quarter of a century appears to be a loss of from 10 to 15 per cent in his earning power.”

I now quote from hearings in New York City, by the Commission on Industrial Relations in the month of January of the present year. The Chairman of that Commission, Mr. Walsh, was questioning Miss Tarbell, who has quite a reputation as a sociologist.

“Chairman Walsh: Did you make any study of wages in these industries you examined?

“Miss Tarbell: Yes, I always did.

“Chairman Walsh: Did you consider the increase of wages as compared with the increase of the cost of living during the same periods?

“Miss Tarbell: Yes, I always took figures on that.

“Chairman Walsh: What did you observe with regard to the Steel Company in the Pittsburgh District, in that respect?

“Miss Tarbell: I think all the country over, the cost of living has increased faster than wages have increased, and it always does. The cost of living goes up and the workmen have to have that behind them in order to get an increase of wages.

“Chairman Walsh: To what extent did you observe that to be the condition in the Pittsburgh District? To what extent has it increased? It has been stated that the cost of living increased between 1901 and the present time to an extent perhaps of 100 per cent greater than the increase of wages. Would that be correct?

"Miss Tarbell: I think that is putting it pretty steep, but I do not know. I have those figures somewhere, but they are not fresh now in my mind. There has been an increase in the cost of living, that is the experience, greater than the increase of wages."

I will now quote from Mr. Daniel Guggenheim's testimony. Mr. Guggenheim is the president of the American Smelting & Refining Company, and he was testifying before the Commission on Industrial Relations in New York City on January 21, 1915.

"Chairman Walsh: Please explain the relative frequency of strikes at the American Smelting & Refining Company's plant at Perth Amboy. I believe there was one in 1910.

"Mr. Guggenheim: Yes.

"Chairman Walsh: And another in 1912?

"Mr. Guggenheim: I do not think these are frequent strikes—to have one in a year or two years, when you consider the difficulties that the laborers have to live under, and the high cost of living, and there naturally will be discontent, and there is discontent, and I have a very sympathetic feeling for their troubles, for I know they are living under very difficult conditions at the present time. I mean during the last year or two, during which time the cost of living has gone up so.

"Chairman Walsh: Would that be your idea—leaving out the word 'frequency'—would that be your idea, that the strikes that have occurred at Perth Amboy were due to the high cost of living?

"Mr. Guggenheim: I should say that would be the main cause of dissatisfaction and unrest in labor, because the cost of living has advanced so much in the last few years.

"Chairman Walsh: As the result of your observation and experience, would you say that industrial discontent in America is increasing or decreasing?

"Mr. Guggenheim: I should say that it is increasing, and has been increasing for many years; I am sorry to say I fear it will continue to increase unless things are done to prevent it for the benefit of the laboring classes.

"Chairman Walsh: What is causing this increase of industrial discontent, in your opinion?

"Mr. Guggenheim: The high cost of living primarily, and next the worst canker the world is suffering from, which is the

canker of envy, and when the poor man realizes how much he has to be envious for, it is natural that it will create discontent, and to a very great extent. That is the unfortunate thing that prevails throughout the entire human race.”

Here is a quotation from a report of the Senate Wage Commission of Missouri, bearing date, February, 1915, based upon investigations conducted for the Commission by George B. Mangold, Director School of Economy, Washington University, St. Louis, and by Anne M. Evans, former Special Agent, Federal Bureau of Labor. In that report we find the statement that—

“In the last ten years the increase in food prices has been from 50 to 100 per cent.”

If all the increases ever received by engineers and firemen had been granted solely on account of the increase in cost of living, they would yet be far behind in the rates. We do, however, urge upon this Board of Arbitration to give serious consideration to that feature.

I wish next to give attention to the requisite qualifications of locomotive engineers and firemen.

In no other industry are employees required to possess the extraordinary qualifications demanded by railroads of engineers and firemen, and this is an important factor that should be considered in the fixing of their wage rates.

Applications of engineers and firemen for employment are extraordinary in form and detail, and the examination conducted in connection therewith most exacting.

The physical examinations of firemen upon which their employment is dependent is more rigid than that conducted by the Federal Government in the enlistment of soldiers; more extensive and particular than is required of applicants for large insurance policies by insurance companies; and are carried to an extreme unknown in any other form of physical examination.

The repeated visual and aural tests to which engineers and firemen are subjected, while maintaining the highest degree of physical efficiency, constantly endanger their employment.

Repeated mechanical investigations of the technical knowledge acquired by firemen, and the high standard of technical qualification required of firemen, makes highly skilled men of

them, often years before their promotion to the position of engineer.

Engineers, before promotion and while yet serving as firemen, are required by thorough and exhaustive examinations and tests to demonstrate their technical qualifications to serve as engineers.

Engineers and firemen who have successfully survived these ordeals are in constant danger of being debarred from employment by any railroad because of injuries and other ailments, many of which are truly occupational.

Mr. A. T. Harding, Vice-President New York Central lines, is quoted on page 1 of the Employees' Exhibit 53, as saying:

"The railroad rank and file, as to-day constituted, probably has the best body of men of any commercial enterprise in the world."

A committee report of the Traveling Engineers' Association, quoted in Employees' Exhibit No. 53, page 4, says:

"Locomotive engineers hold an important position as masters of power, which controls the movement of the commerce of the world. Men holding such positions must necessarily be trained masters of their work, possessing keen judgment and broad talent."

Another report of the Traveling Engineers' Association in 1910, quoted in Employees' Exhibit 53, page 7, says:

"Men for the position of Fireman should be selected from the best material possible to obtain."

Employees' Witness DeGuire testified that Firemen would be discharged if unable to pass physical examination at the time of promotion.

Employees' Witness Martin testified that every three years Engineers and Firemen must pass eyesight and hearing test, and at the end of fourth year's service Firemen failing to pass eyesight examination were taken out of service.

Witness Martin also testified that rules relative to height and weight were becoming stricter. In fact, he testified that if he were out of employment the road by which he was then employed would not again employ him, because he was not tall enough, and yet he was firing a Mallet engine.

I want to say that it is the opinion of many of us connected with the Employees' side of the proposition, that these rigid ex-

aminations at the time employes are admitted to the service, and oft-repeated after employes are in the service, are not for the good of the service so much as to relieve the pension systems and the so-called relief associations of obligation. If by this weeding-out process every man who begins to weaken under the strain can be put aside, there will not be many pensioners left at 60 or 50 years of age, and there will not be many men to whom they will have to pay claims from their so-called relief department. If they discover that a fireman by physical effort has perhaps injured himself but slightly, "let's get rid of him before we have to take care of him." That is what is the matter with the examinations today.

The occupational hazard of locomotive engineers and firemen is of such high degree that special consideration should be given to such hazard in the fixing of wage rates.

Almost one-half of all deaths of members of the Brotherhood of Locomotive Firemen and Enginemen are the direct result of railway accidents. Of 1,224 members who became physically disabled during the ten years ending December 31, 1913, 544 of such disabilities were amputations of hands or feet. In no other occupation, it is believed, will the hazard of employment be shown as great.

I have stated that several times, and I have stated it emphatically, because wherever I have stated it I have been told they could hardly believe my statement. It seems incredible that such could be the fact, but it is true nevertheless.

The citations that follow this in the brief will show you where this information can be found.

Scientific investigations have reported the occupational hazard of the locomotive Engineer to be far greater than in many other industries.

Insurance of Engineers and Firemen by many Old Line companies and fraternal societies is prohibited, and where not prohibited the rates are usually far in advance of normal rates.

Now, let us see. Employes' Exhibit No. 44, page 6, has this to say:

"Some of the companies refuse entirely to accept Firemen while others accept them under certain restrictions. The New York Life Insurance Company, for instance, in its circular of instructions to Agents (Form 1519, issued May, 1912) says:

'Locomotive Engineers must have eight years added to their age, and may receive no cheaper policy than a twenty-year endowment. Locomotive Firemen must have twelve years added to their actual age and may receive no cheaper policy than a twenty-year endowment.' "

Upon the reading of that perhaps its importance would not make itself known. The rate is advanced twelve years. That is, a Fireman of the age of 22 would be charged the rate of 34, but that is not half of it. They require him to take out an endowment policy, which means that the rate on that policy is more than twice as high as on any other policy. So they make the rate so high that no Locomotive Fireman can afford to carry Old Line insurance. It is a prohibitive rate. Instead of saying, "We will not insure Firemen," they make the rate so high that Firemen cannot afford to insure; and the same applies practically to the Engineer.

Mr. Burgess: Mr. Carter, before you leave that subject, may I ask you a question?

Mr. Carter: Yes.

Mr. Burgess: In that paragraph you state:

"Of 1,224 members who became physically disabled, during the ten years ending December 31, 1913, 544 of such disabilities were amputations of hands or feet."

Then following, further down in the quotation, you state that 13½ per cent of the blindness was caused by the excessive light and heat of the fire box. I would like to know if that 13½ per cent is included in this number set forth, 1,224.

Mr. Carter: Yes.

Mr. Burgess: It is?

Mr. Carter: Yes, and I find now that I have omitted a very important point in this brief. I desire, before I go any further, to return to the switching service, and to state why there should be a higher rate paid for night service than for day service. I find I overlooked that.

Mr. Stone: You talked upon that.

The Chairman: You discussed the facts of it, as I understand.

Mr. Carter: Did I?

The Chairman: Yes.

Mr. Carter: Well, I want to call your attention to some

very important citations. There is a quotation from Dr. W. B. Cory, where he showed by his own experience that four out of ten cases of blindness reported in a certain period of time were due to engineers and firemen operating switch engines at night. This testimony will be found on pages 2702 and 2703 of the proceedings in this Arbitration.

"Mr. Carter: Now, we find, going back to and including Frew, there were forty-four cases of blindness on that page and the last page of the table, and I find that four, or 10 per cent, were due to the fact that engineers or firemen were unable to see obstructions at night in yards—four is not quite 10 per cent of forty-four. In this Arbitration, engineers and firemen are asking for a rate of two cents an hour higher while switching at nights than while switching in days. Does not your table set forth the extra hazard of switching at night?"

"Dr. Cory: I don't know that the table sets it forth, but my personal recollection, from handling the disabilities in the field, would lead me to believe that the differential asked for is not excessive at all.

"Mr. Carter: There are four actual cases due to obstructions not seen at night?"

"Dr. Cory: Yes, sir.

"Mr. Carter: In switching service?"

"Dr. Cory: Yes, sir.

"Mr. Carter: Four is not quite 10 per cent of forty-four.

"Dr. Cory: About one-eleventh."

Your question, Mr. Burgess, called to mind the fact that in that blindness to which you referred there were four cases of switch engineers and firemen working at night, who were made blind by being struck in the eye by obstructions they could not see. The probabilities are that if they had been working in the daytime they would have avoided those obstructions; and the reason I went back to that is because you asked me the proportion of those accidents that resulted in blindness, and I recognized the fact that I had overlooked referring to that matter.

Mr. Burgess: The purport of my question was, after deducting the 544 from the sum total, to ascertain whether the remaining members of your organization were physically disabled as the result of railway accidents, or due to the service?

Mr. Carter: Yes; and the cases of blindness from heat of the fire box are included in that remaining number.

Mr. Stone: So you would take $13\frac{1}{2}$ per cent more?

Mr. Carter: That would be $13\frac{1}{2}$ per cent more.

Mr. Burgess: Yes.

Mr. Carter: Now, we come to the increased work and productive efficiency of Locomotive Engineers and Firemen.

During recent years the Western Railroads have made extraordinary gains in operating efficiency. By the installation of locomotives of greater tractive power and cars of greater capacity, by the addition of a greater number of cars to freight and passenger trains, by the elimination of curves and the reduction of grades, and also by the strengthening of roadbed and structures, remarkable increases in freight train loads have been accomplished, and it has been possible to move a constantly increasing volume of traffic, or of ton and passenger miles, with a comparatively small increase in locomotive or train miles. These developments have been attended by a three-fold effect upon Engineers and Firemen:

(1) There has been a marked increase in their labors and responsibilities. The Fireman has had more arduous physical work to perform because of the necessity on coal-burning Railroads of handling more fuel for each locomotive-mile traveled. Measured by this standard, the sworn annual statements of Western Railroads to the Interstate Commerce Commission show that the work of Firemen on coal-burning locomotives increased from 52 per cent to 162 per cent, according to Railroads, during the period 1890-1913, and from 34 per cent to 118 per cent during the period 1900-1913. The Engineer has found it necessary to operate a larger and more complicated mechanism and has had his duties increased by the responsibility of looking after a much heavier train.

The citations that follow support the conclusions reached.

(2) The Productive Efficiency of Engineers and Firemen, or, in other words, the volume of traffic handled per Engineer and Fireman, has been greatly increased. This is apparent from a comparison of the number of ton miles or traffic units transported by Engine Crews at the present time as contrasted with former years. Measured on the basis of each \$1,000 compensation paid Engineers and Firemen, the Freight Engineers on

twenty-four representative Western Railroads, considered as one system, in 1913 handled 92 per cent more ton miles than in 1890, and the Freight Firemen, for each \$1,000 paid them, transported 83 per cent more freight traffic in 1913 than in the year 1890. Considering both freight and passenger traffic together, the Engineers and Firemen employed by these representative Western Railroads, on a very conservative basis of calculation, which grants every advantage to the Railroads, for each \$1,000 paid, hauled a volume of combined freight and passenger traffic from 40 per cent to 50 per cent greater in 1913 than in 1890. On individual Railroads the gains made in Productive Efficiency in many cases were even more remarkable than those mentioned above.

Since the year 1900, the same extraordinary advances in operating efficiency and productivity of Engine Crews have been apparent. For ten representative and leading Western Railroads, considered as one operating system, the increased Productive Efficiency of Freight Engineers, as measured by each \$1,000 compensation, was 27 per cent more in 1913 than in 1900, and for Freight Firemen was 24 per cent greater in 1913 than 1900. If the comparison as to Productive Efficiency of Engineers and Firemen be further restricted to the period 1909-1913, gains in output for this limited period, corresponding to the larger showing for the more extended period of time, are also apparent.

The point of greatest significance, however, in any discussion of Productive Efficiency, for any period of time, does not rest merely upon the comparison of how many ton miles, passenger miles, or traffic units are handled at the present time as compared with a former year for each \$1,000 paid Locomotive Engineers and Firemen, but is primarily to be found in the increase in the volume of traffic handled by Engineers and Firemen now as compared with some past year on the basis of each additional \$1,000 in compensation paid to them by the Railroads. When the gains from the Productive Efficiency of Engineers and Firemen are considered from this point of view, which is the only real and true basis of measurement, the results attained have been even more remarkable than when measured on the basis of each \$1,000 paid to Enginemen. During the past five years alone, or, from 1909-1913, a very pronounced advance

in output has been made by Engineers and Firemen, from a minimum of 11 per cent, as shown by the Great Northern Railway, to 1,037 per cent, shown by the Northern Pacific Railway.

The citations that follow give the basis for that statement:

I want to read a statement of the Bureau of Railway Economics which is maintained and supported at Washington by the railways. In Bulletin 53, page 10, they say:

“The greatest economies have been secured by increasing the number of tons hauled per train, and by increasing the amount of traffic handled in proportion to the number of men employed. The extent to which, in their efforts to handle traffic economically, the railways of the United States have increased their trainloads, is indicated by the fact that the average number of tons per train in this country in 1890 was 175; in 1900, 271, and in 1910, 380. In the region of heaviest traffic, that comprising in general the states of New York, Pennsylvania, New Jersey, Delaware and Maryland, the average number of tons per train increased from 218 in 1890 to 502 in 1910. On some lines the average trainload exceeds 1,100 tons; trainloads of minerals ranging from 3,000 to 5,000 tons are not uncommon, and sometimes a train has as many as 6,000 tons. These heavy increases in trainloads have been effected very largely by increasing the capacity of cars and their loading, and by increasing the number of cars in a train. The average capacity of a freight car in this country increased from 28 tons in 1902 to 36 tons in 1910. Loaded freight trains often contain 50 to 75 cars, and trains containing even larger numbers of empty cars and exceeding half a mile in length, are run not infrequently in some parts of the country.”

The Chairman: We will take an adjournment until 10 o'clock tomorrow morning.

(Whereupon, at 5 o'clock P. M., March 29, 1915, an adjournment was taken to March 30, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
*under the Act approved July 15, 1913, by agree-
 ment dated August 3, 1914.*

Chicago, Illinois, March 30, 1915.

Met pursuant to adjournment at 10:00 o'clock A. M.

Present: Arbitrators and parties as before.

Mr. Carter: Mr. Chairman and gentlemen of the Board, last evening, just previous to adjournment, we had taken up the increased work and productive efficiency of locomotive engineers and firemen. I had just read from Bulletin 53 of the Bureau, of Railway Economics, maintained by the railroads in the city of Washington, a statement as to the great increase in trainload and decrease in numbers of trains.

I would like to call attention to Employes' Exhibit 23, from which I shall briefly read. On page 8 the following appears with regard to a chart that appears on page 7:

"The foregoing chart shows that these railroads, during the period 1909-1913, by increasing the tractive power of their locomotives and the capacity of their freight cars, were enabled to make a gain in their freight train loads of 68 tons, or 19.48 per cent. They were, therefore, able to handle an increase in the volume of freight traffic of 29,746,604,829 ton miles, or 37.07 per cent, with an advance of only 14.58 per cent in freight train miles and 14.34 per cent in freight locomotive miles. Considering both freight and passenger traffic together, a growth of 34.60 per cent in the traffic units, or of both ton and passenger miles

was transported with an increase of only 19.11 per cent increase in revenue train miles."

Gentlemen of the Board, that refers particularly to the period elapsing since the last wage movement. While we do not concede the position of the railroads to be tenable, when they seek to deny this Board the right to consider past productive efficiency, even though that should be the final decision, there yet remains a great increase in the productive efficiency of locomotive engineers and firemen since 1909. It is true, the wage settlements bore date of 1910, but the negotiations leading up to the arbitration of the firemen and hostlers, which was the first movement, began early in 1909, and the conclusions reached were largely upon the experience as set forth in exhibits, testimony and argument ending with 1909. And for that reason we insist that 1909 is the date from which these matters should be reckoned. On page 8 of Employes' Exhibit 23, I quote the following: "For each \$1,000 increase in wage payments to freight engineers and firemen during the period 1903-1913, these railroad companies received the following gains in the productivity of their engine crews:

"Increase in ton miles per \$1,000 increase in compensation to engineers, 21.99 per cent; freight firemen 21.21 per cent."

Now, for every \$1,000 increase in the compensation to these freight engineers and firemen, the railroads have received in turn practically 22 per cent increase in ton miles.

That statement is based upon the totals for forty-six representative railroads.

On page 9 of this exhibit we find that the increase in ton miles during this four year period was 37 per cent, while the increase in freight train miles was only 14 per cent, and the increase in freight locomotive miles, 14 per cent.

I have omitted the fractions of one per cent. It is shown that by larger power, by the heavier trains, 37 per cent greater ton miles have been produced by engineers and firemen, with only a 14 per cent increase in train or locomotive miles.

Now, for the ten representative Western railroads which are largely proprietary roads, found on page 9, you will find the table on page 12 which shows the figures for those roads. Since 1909, the ton miles have increased 30 per cent, while the

freight train miles have increased only 9 per cent, and the freight locomotive miles only 9 per cent.

That means that because of these larger locomotives and the heavier loading of all locomotives the increased productive efficiency of locomotive engineers and firemen has produced 30 per cent increase in ton miles at an expense of only 9 per cent in locomotive miles.

The Chairman: You speak of these as being proprietary roads. What per cent of the roads, parties to this movement, are owned by these roads?

Mr. Carter: I cannot recall that, Mr. Chairman, but I can get that information for you. I have read it in one of the exhibits, but I do not recall it at this time. I will get that information.

The Chairman: You need not bother now.

Mr. Carter: That has been expressly stated in one of the exhibits, but I cannot call to mind now what exhibit it is.

The Chairman: Do I understand that you base your claim for an increase in wage solely on productive efficiency?

Mr. Carter: No, sir, that is simply one factor. We have advanced several reasons; increased productive efficiency, increased cost of living, increased responsibilities and labor; and while I have just emphasized the increase in the productive efficiency since 1909, we still contend, gentlemen of the Board, that at no time in the past has any Arbitration Board taken into consideration productive efficiency.

The Chairman: In other words, that phase of the question has not been considered heretofore by boards of arbitration?

Mr. Carter: We have the authority of the neutral arbitrator in the last arbitration of the Firemen and Hostlers in this Western country, wherein he expressly explains that so far as the 15 cents to all passenger firemen and the 15 cents to oil burning firemen is concerned, that was granted entirely on account of the increased cost of living up to that time. They did say, however, that an additional 15 cents would be paid to firemen on coal burning engines, presumably on account of the increased labor.

Now, so far as the engineers were concerned, they had no arbitration, but they were given practically the same percentage of increase in the aggregate that the firemen and hostlers were

given, and the same would apply to the conductors and brakemen, approximately a 10 per cent increase in the aggregate in 1910.

This increased productivity has been attended by a decrease in costs to the railroads, in terms of wage payments to engineers and firemen for each unit of traffic handled, or, in other words, it has cost the railroads less in outlay to engineers and firemen to transport ton-miles and passenger miles. During the period 1890-1913, the ratio of the cost of engineers and firemen to total operating expenses for twenty-four representative Western railroads, considered as one system, declined from 9.89 to 8.06, while the proportion of operating revenues absorbed by wage payments to locomotive engineers and firemen fell from 3.94 per cent in 1890 to 3.30 per cent in 1913. During this same period the outlay in terms of engineers and firemen for each 1,000 ton miles handled by these 24 representative Western railroads declined from 65.2 cents to 32.1 cents, or, in other words, each 1,000 ton miles handled costs 33.1 cents less in wages to engineers and firemen in 1913 than in 1890.

Having regard for that fact, engineers, firemen and all other employes are resenting the attitude of certain representatives of railroads in circularizing the country to prejudice the country against railroad employes. The efforts of certain railroads, and I am going to excuse the operating officials from having any responsibility therefor, is to convince the public that these railroad organizations are robbing the railroads. It is not true, and it is shown there that during this same period the outlay in terms of engineers and firemen for each 1,000-ton miles handled by these 24 representative Western railroads declined from 65.2 cents to 32.1 cents, or in other words, each 1,000-ton miles handled cost 33.1 cents less in wages to engineers and firemen in 1913 than in 1890.

Similar tendencies as to reduction in cost in terms of compensation to engineers and firemen are characteristic of the more recent periods 1900-1913, and 1909-13. As operating efficiency has been developed and as there has been a tendency to approach the maximum in the way of heavy train loads and the use of larger cars and heavier engines with greater tractive power, the decline in operating costs has been, as might be expected, proportionately smaller.

On the other hand, as the introduction of engines of greater tractive power, which are able to haul a larger amount of traffic than those which they superseded, has increased, the field for employment of engineers and firemen has been limited, and the opportunities for promotion have been restricted. It is apparent, of course, that with an expansion of business and industry that there may be an increase in the number of engineers and firemen required even under the new conditions. The development of new traffic, however, has not appeared to counteract the tendency towards the restriction of employment and promotion brought about by the installation of heavier power and the development of greater train loads. The earning capacity of engineers and firemen, even at higher rates of pay, has declined, as compared with the period before the heavy engines were installed. They cannot within a certain period, as a month, make the same mileage as formerly.

I desire to especially cite the following:

Employes' witness Rose says that the increased tonnage has reduced earnings and reduced working force of firemen 60 per cent.

Employes' witness Ralston testified that there is less demand for engineers and firemen and promotion slower since tonnage of trains has been increased.

Employes' witness Kane testified that, with large engines and heavy tonnage, the force of engineers and firemen required to do the same work is much less.

Employes' witness Vance testified that the heavier the drag, the slower the speed, and reduction of speed of trains from more to less than ten hours, is an actual reduction in the earnings of firemen.

Employes' witness Hicks testified that because the prospects of promotion from fireman to engineer has become more-remote on account of increased tonnage, firemen should have additional wages to compensate for this loss.

Employes' witness Bloom testified that heavy power and increased tonnage have caused engineers to be put back to firing and firemen to be dropped.

Employes' witness Laherty testified that almost one-third of the engineers and firemen were taken out of service on the

M. K. & T. by the introduction of big engines, which hauled the same amount of tonnage.

Understand that these citations are not in the language of the witnesses. It is simply a synopsis of what was said by the witness.

Employes' witness Jones testified: "We are handling the same trains out of there today with five engines and one train crew that we handled some years ago with nine engines and three train crews."

There is no question, gentlemen, but what there has been a continuous increase in tonnage hauled by one engine crew, and that process will be continued.

In their annual reports to stockholders during recent years, railroad executives have commented in detail upon the development of greater freight train loads, the handling of a larger volume of traffic with fewer locomotive and train miles, and the decrease in labor and general operating expenses which have been thus secured. Their statements fully corroborate the claims of the locomotive engineers and firemen as set forth in the following Proceedings.

I wish to read from the annual report of President Miller of the C. B. & Q. Railroad for the year 1912.

"In order to meet the continued demand for more and better service and facilities, the company has in past years expended very large sums in the reduction of grades and curvature for more and larger side and passing tracks, heavier locomotives, and larger equipment whereby the train-load has been very greatly increased. . . . In 1912, substantially twice the volume of freight business was handled, with nearly 10 per cent less of freight train miles run to move it. . . . the average number of revenue tons per train mile increased from 200.43 in 1901 to 437.75 in 1912, or an increase of 118.4 per cent. The average number of tons per loaded car mile increased from 12.50 in 1901 to 18.2 in 1912, or an increase of 45.6 per cent."

That is the testimony of Mr. Darius Miller, in communicating to his stockholders.

The annual report of the Chicago Great Western for 1913 says:

"As compared with four years ago, the train mileage has decreased 22.05 per cent, while at the same time, there were in-

creases in tons per train mile of 58.72 per cent, in freight revenue 31.76 per cent, and in revenue per train mile of 68.72 per cent. The amount saved by the reduced freight train mileage in 1913 from that of 1909, is, in round figures, \$673,000."

We could quote eminent authorities upon this subject without end.

It is clear, also, that the development in the productive efficiency of locomotive engineers and firemen employed on Western railroads has not reached its maximum. This is shown conclusively by a series of interviews with railroad presidents, which were published in the *Railway Age Gazette* in its issue of April 10, 1914. With one exception, they all stated that they believed there would be further increases in the weight of freight train loads on their railroads. The realization of this prospect will obviously mean more work and responsibilities for engineers and firemen and further increases in their productivity.

I shall not read the citations. They are there for observation.

The development of operating efficiency by Western railroads obviously has for its primary purpose the reduction of operating costs per unit of traffic, and the establishment of a larger margin of profit or net gain to the transportation companies.

The ultimate cost units in conducting transportation are the ton mile and the passenger mile. The increasing of the freight train or the passenger train load may be attended with some elements of greater expense, but the larger amount of revenue received from the greater number of passengers and the increased amount of freight in a train is sufficient to cover the additional costs necessary, and still leave a margin of profit for net revenue gain. Carried to its last analysis, this method of economical operation results in a lower cost of transportation per ton mile and per passenger mile.

Detailed exhibits have been presented to show the revenue gains arising from the development of operating efficiency on Western railroads as a whole, as well as from the increased work and productive efficiency of locomotive engineers and firemen. By way of illustration, during the period 1890-1913, on twenty-four representative Western railroads, considered as one system, the revenue gains brought about by increased operating

efficiency were sufficient to offset all added costs of operation, whether arising from Engineers and Firemen, or other items of operating expense, and still have a net gain in operating revenue, over and above all increased costs, of 26.87 cents per revenue train mile. The increased productive efficiency of labor and capital employed on these twenty-four railroads, in other words, not only reimbursed the companies for additional cost incurred, but also yielded a very handsome profit. Similar results were obtained through the development of operating efficiency and increased work by employes during the period 1900-1913.

There is no doubt, and it has been freely acknowledged and repeatedly stated, that the growth of the large revenue gains discussed in the preceding section have been in part due to additional capital investment in Western railroads, which should receive a liberal return for its use and risk involved. A complete analysis of the increased operating efficiency of Western railroads, therefore, brings up the question as to whether the revenue gains, which have resulted from the additional capital investments, managerial ability, and the increased work and productivity of engineers and firemen and other employes, have been sufficient, after meeting the advances in operating costs, to pay a fair remuneration to additional capital investment and leave a surplus over and above all these outlays for increased compensation to locomotive Engineers and Firemen.

A study of the financial and operating performance of Western railroads during the past five years, brings an unequivocal and affirmative answer to this question. An analysis of the operating and financial performance of 43 representative Western railroads, considered as one system, during the period 1909-1913, showed that after the payment of all increases in costs of operation, and after allowing interest at 4 per cent per annum, for expenditures for additional property during the same period, there was a balance remaining to compensate the increased productive efficiency of locomotive engineers and firemen and other labor of \$50,541,129. If a return of 4 per cent be considered too small, in the light of the present conditions affecting the supply of capital, and 5 per cent be allowed to added capital investment during this period, including the additions made from income, there would still remain \$34,629,574 available for the compensation of increased productive efficiency on the part of locomotive

engineers and firemen and other labor. These gains are now contained in the accumulated surplus and other assets of the railroads, and locomotive engineers and firemen are entitled to a still further participation in these gains because of their efficiency and because of their increased work, duties and responsibilities.

In addition to the amounts, as stated above, which are now shown to be available, according to the sworn statements of the railroads to the Interstate Commerce Commission, for the remuneration of the increased work and productive efficiency of locomotive engineers and firemen, additional sums amounting to hundreds of millions of dollars would also be available at the present time, had the finances of the Western Railroads been wisely and properly made. A review of the past history of Western railroads, in general, discloses the fact, however, that the extraordinary gains in revenue—which have arisen from the bounty of the Federal and State governments, the populating of the country, the development of trade and industry, the adoption of mechanical devices and improved operating methods, added capital investments, and the increasing work and efficiency of employes, have, to a large degree, been absorbed by fictitious capitalization, or dissipated by improper or misguided financial management.

Mr. Chairman and gentlemen, before we proceed briefly to detail the points we will bring out, I desire to refer to a change of attitude on the part of railroad employes toward their employers, with regard to the methods adopted by those who control the financial policy of these railroads.

In the Arbitration of the Firemen and Hostlers in 1912-13, in the Eastern District, a vast amount of information on this subject had been secured. A year and a half has been devoted to a research upon the subject; and bad as it is shown to be in the West, the Western railroads can console themselves that they are not as bad as the East.

When it came to the presentation of the case in the Arbitration, we were asked how much time we desired. The reply was that it would depend largely upon the attitude of the railroads in their direct testimony and rebuttal, and in their briefs; that if they saw fit to go into certain matters we would desire time to do the same.

It was believed at that time perhaps best not to expose the skeletons in the closets of our employers, and we desisted; and matter that cost many, many thousands of dollars to prepare, has never yet been printed. Much of it, however, has been exposed since its preparation, particularly that referring to the New York, New Haven & Hartford. We had that and more long before Mr. Mellen went on the stand as a witness.

Immediately after our Eastern Arbitration, and in fact during that time, some one who dictates the publicity policy of railroads began the most vicious campaign against railroad employes that was ever witnessed. Time card folders, printed for the information of the public, were used to convey the impression to that public that the railroads were being robbed by these labor organizations, and that the freight increase had been made necessary because of the throttling methods of these labor unions. Moreover, they used the menus in their dining cars as germ carriers to inoculate the minds of the public with the belief that railroad employes were a band of robbers, and that if the public had to pay higher freight rates, it was simply because of these railroad employes.

The day has come when we have to fight the devil with fire, and we are going to do it; and if they keep up their publicity matters, trying to convince the public that these railroad employes are a band of robbers, these labor organizations will maintain a publicity department that will make them sorry for it. We have learned how to conduct publicity departments. We have been forced to do so by the attitude of the railroads; and, gentlemen, it is because of the attitude of the railroads in impeaching the integrity and honesty of these labor organizations that we have been forced at this time to expose some of the wrongdoings of the financial management of these Western Railroads.

During the twenty years following 1850, the Federal Government, together with the State of Texas, made land grants to Western Railroads to aid in their construction, to the amount of 305,114 square miles. This is equivalent, approximately, to all the area east of the Mississippi River and north of the Ohio and Potomac Rivers, with the exception only of the states of Wisconsin and Michigan. The unfortunate feature of this land grant policy was that these great subsidies were diverted from

their original purposes to the enrichment of a few financial adventurers. A number of Western railroads, such as the so-called Pacific Lines, were built in a spirit of financial corruption, by collusive construction contracts, stock manipulation, excess capitalization, and the defrauding of the government and the public. The value of the extensive areas of lands granted were capitalized and distributed in the form of securities to the stockholders. In other instances, the value or income-producing power of the land was capitalized. A few railroads such as the Northern and Southern Pacifics, and the Atchison, Topeka & Santa Fe, retained very valuable holdings of timber and minerals, despite the stipulations that such lands be sold to settlers in small tracts. They are now among the unreported assets of these transportation companies. The Southern Pacific Company alone is now estimated to have oil and timber holdings ranging in value from \$100,000,000 to \$700,000,000, which are reported to the Interstate Commerce Value of a book value of slightly more than \$40,000,000.

During the years following the construction of the Western railroads through government aid, and extending into the early nineties, the greater number were characterized by financial managements which either dissipated their resources in the form of special distributions to stockholders, or by stock manipulations, or capitalized cumulatively the expansion of trade and business and gains in operating efficiency, together with the added net revenues produced by the increased work and productive efficiency of locomotive engineers and firemen. The hundreds of millions of dollars of fictitious capital issued during this period served to absorb and conceal the increases in operating revenues, and not only constitute a present drain upon the operating performance of the transportation companies, but will continue in the future to absorb revenue, a portion of which should be available for the added compensation of locomotive engineers and firemen.

After the panic of 1893, the reorganization of a number of Western Railroads which had been forced into the hands of receivers by that financial catastrophe, a tendency towards the consolidation of independent lines into large systems, became very pronounced. The movement progressed so rapidly that at the present time a comparatively few independent rail-

roads control the entire western transportation industry. Of the 98 railroads engaged in the present Arbitration, practically 80 are controlled by 13 independent proprietary systems.

Mr. Chairman, that is not an answer in detail to your last questions, but gives a general idea of the subject. Of the 98 railroads engaged in the present Arbitration, practically 80 are controlled by 13 independent proprietary systems.

The Chairman: My associate, Mr. Nagel, has called my attention to the statistics, and I have them here.

Mr. Carter: A few bankers, by their control of the avenues of credit and the market for the sale of securities, by becoming reorganization managers of certain railroads and forming voting trusts, by acting as fiscal agents, and by the purchase of stock, have finally secured control of the Western Railroad situation. These banking institutions are, in turn, through interlocking directorates and stock ownership, controlled by two distinct financial groups—the Morgan group and the Rockefeller group. It truly may be said, therefore, the Morgan and Rockefeller interests dominate the entire Western Railroad situation. The significance of this concentration of financial control upon the economic interest and advancement of Locomotive Engineers and Firemen and other employes has a two-fold aspect: the potential control of working conditions and compensation of employes, as well as their general economic welfare and progress, is in the hands of these two groups of affiliated banking interests, and railway presidents are made and unmade by these dominating financial interests, and the fundamental policy required of them is to develop as large an earning power as possible in order to produce market values for securities and to pay dividends on securities which have been issued without actual investment or additions to the earning value of the properties.

As a result of the methods of financing or selling securities developed under this banking control of Western Railroads, large discounts and commissions have been paid which have been without justification. By way of illustration, the recent investigation of the St. Louis & San Francisco Railroad by the Interstate Commerce Commission disclosed the fact that discounts and securities were paid to banks and syndicates which aggregated the enormous total of \$32,152,602 during the period

1896-1913. Enormous bonuses to stockholders have also been granted during this same period of years. More than \$250,000,000 was distributed in this way during the period 1900-1910 by eight representative Western Railroads alone. By the sale of securities at much less than their prevailing market prices, these companies were obviously deprived of cash resources which they should have had, and at the same time issued excess capitalization which became a drain upon operating revenue. If it had not been for these practices, the financial status of the railroads, which are parties to the present Proceedings, would be much more satisfactory, and much greater amounts of surplus revenues would be available for the increased compensation of Locomotive Engineers and Firemen and other employes, and for other legitimate purposes.

Recent railroad reorganizations have also been made the basis for the flotation of immense amounts of fictitious securities which have actually absorbed existing revenue, through unwarranted dividend and interest requirements, or will be made the basis for the absorption of future revenue gains arising in part from the additional work imposed upon Engineers and Firemen and from their increased productivity. The reorganization of the Atchison, Topeka & Santa Fe Railway in 1896 affords a striking example of these activities. As the result of this reorganization, the Atchison stock issues were inflated, without adding anything to the value of the property or to its earning capacity, to the amount of \$166,093,095. More than \$112,000,000 has already been paid in dividends upon these fictitious securities which constitute a liability against the property but do not represent any contribution ever made in any way to its earning capacity. The annual dividends now paid upon these stock issues amount to \$9,167,456. This amount is considerably more than double the total annual outlay now made by the Atchison to its Locomotive Engineers and Firemen. Similar instances of the inflation of securities have been characteristic of the consolidation and reorganization, during recent years, of other Western Railroad properties.

An indication of the extent to which the financial condition of Western Railroads has been adversely affected by financial mismanagement, and a startling illustration of the absorption

of revenue gains produced by operating efficiency and increased work and output of Locomotive Engineers and Firemen and other employes has been afforded by an analysis of the dividend disbursements of only fourteen companies during the past fiscal year—a subnormal period of industrial depression. These companies alone were found to have paid dividends in 1914 on fictitious stock issues amounting to \$43,167,599. This does not account by any means for all of the excess stock of Western Railroad which are engaged in these Proceedings, but only for a number of representative and illustrative cases. A comprehensive estimate would also have to take fictitious bond issues into consideration. If the future outlook were also considered, hundreds of millions of dollars of fictitious capitalization would be discovered which has not as yet received remuneration but which may become a drain upon operating revenues.

The claim has been made by the Railroads that the development of operating and Productive Efficiency has not been attended with “profits.” This statement loses its significance, however, when it is recalled that the fiscal year 1910, was an unusually prosperous year, and the fiscal year 1914, was one of opposite characteristics, being marked by an industrial depression, and a marked decline in the volume of trade of all kinds, and Railroad traffic. Manifestly, no significance as to the profits arising from increased Productive Efficiency can be attached to the comparison submitted by the Railroads of a very prosperous year, as 1910, with a recent year of depression as 1914, or with current conditions of depression, in order to show a decline in gross or net operating revenues of Western Railroads. Such a comparison is untenable because it obviously attempts to compare the incomparable—a volume of traffic above normal with a volume of traffic below normal. It should also be recalled in this connection that in determining whether Productive Efficiency has yielded an adequate return on additional property investment since 1910, the character of the capital investment made during the past four years should be taken into consideration in order to determine whether these outlays have been of such a description as to be immediately productive, or on which a longer time may be necessary to expect a full return than has elapsed to date. It would appear that the Railroads, although they have received profitable returns, should not

expect immediately a full return on their capital commitments made since 1910. It should also be noted that errors were made in the compilation of Railroad Exhibit Number 6, which require the reduction in the increased capital outlay since 1910, as stated therein, by more than \$40,000,000, or, in other words, at 5 per cent return per annum, \$2,000,000 less each year would be required to remunerate additional capital outlay than is indicated by this exhibit.

If the Railroads contend that the Productive Efficiency of Engineers and Firemen has not resulted in profits because it has not provided interest and dividend payments upon outstanding capitalization, they should be required to prove that the financial management of the Railroads has been acceptable and beyond reproach. Enginemen have no control of operating or managerial efficiency and should not be expected to bear the burden of operating inefficiency or financial mismanagement. The determination as to the degree of participation to be accorded them should, therefore, be based on locomotive or train mile costs and revenue gains. On this basis, Locomotive Engineers and Firemen have an opportunity to demonstrate their increased work and productivity. By this standard, it is at once evident from the testimony submitted that the labors and responsibilities of Enginemen have increased, that their productivity, in terms of units of transportation, has rapidly advanced, and that their cost to the Railroads in terms of units of transportation has declined, leaving large revenue gains available for their increased compensation.

Gentlemen of the Board, the defense of the Railroads against our theory advanced, of increased productive efficiency of engineers and firemen, would be considered absurd if it were used by an ordinary business man. What would be thought of the owner of a huge department store who had a three-story building, but to add to the importance of his business, he had erected a 16-story building, and then said to the employe, the girl at work, if you like, who is selling perhaps 25 per cent more goods in a day, "Why, we cannot pay you any more wages because, look, I have got to pay interest on what I have borrowed to build this massive monument to my memory?"

What would be thought of an employer in any other industry who would go to Monte Carlo, as some of the Steel Trust men

have done, and lose thousands and thousands of dollars, and borrow money, and plaster his property with mortgages because of the dissipation of his funds? And when the employes of this individual manager of some huge business asked for an increase in wages he would say, "I am not paying expenses. It takes all of our receipts to pay interest on the money I borrowed because of my last trip to Monte Carlo." It is only railroads that can advocate these theories with any degree of success. Any business man who attempted to build up his fortune by adding to the mortgages on his property would be considered a business failure. But with railroad corporations and some other huge corporations the profits are not in the product, but in the manipulation of the financial securities of that corporation, and so long as the United States government permits this profitable manipulation of railway securities they will never have any money with which to pay employes.

They contend that they have no money now. They have plenty of money. They are reserving it to pay dividends on stocks and interest on bonds, and in the year 1914 have used large proportions of their surpluses for that purpose.

In order to demonstrate that fact, I will now take up the financial ability of Western railroads to pay increased wages to their locomotive engineers, firemen and hostlers.

Despite the financial mismanagement and dissipation of resources, which has characterized the past history of a number of Western railroads, they are still able to pay higher wages. If the administration of these finances in past years had been proper, they would have been in a much stronger financial position at present. As it is, however, they are fully able to pay additional compensation to locomotive engineers, firemen and hostlers. The reasons which are the foundation of this statement are, briefly, as follows:

The combined accumulated surplus of 43 leading Western railroads, which are parties to the present Proceedings, amounted, on June 30, 1914, to \$625,895,415.

The actual cash on hand or in bank reported by the Western railroads engaged in the present Proceedings amounted, on June 30, 1914, to \$208,278,196.

Thirteen independent railroads practically own or control the other railroads which are parties to these Proceedings.

These 13 proprietary companies, on June 30, 1914, had an accumulated surplus of \$440,812,500, and cash on hand amounting to \$109,101,107.

Larger dividends were disbursed by Western railroads in 1914 than in 1913 or 1910. There were no dividend or interest curtailments by Western railroads in 1914, the finances of which had been properly and conservatively managed in the past.

The Chairman: Mr. Carter, I would like to ask you a question, please.

Mr. Carter: Yes, sir.

The Chairman: What have you to say to the contention of these roads, some of them, that they have been unable for the past year or the past two years to pay any dividends? What have you to say to that contention?

Mr. Carter: Why, it is a case of two diverse statements. We state that larger dividends were disbursed by Western railroads in 1914 than in 1913 or 1910. Without quoting them, I understand they say they have not paid any dividends, or practically none. Now, it is a matter that will have to be decided.

The Chairman: Well, I just wanted to get your viewpoint.

Mr. Carter: Mr. Chairman and gentlemen, this is not the only place where our opinions diverge. All the way through our contentions are diametrically opposite to theirs, except we agree that a man by working every day in the year and 16 hours a day can earn more money than he can in other industries where the day's work is limited to eight hours a day and Sundays and holidays are excluded. In that we are agreed.

The Chairman: Well, do I understand then, that you controvert the proposition that some of these roads have not been able to pay dividends?

Mr. Carter: I agree that there are some roads, Mr. Chairman, that are in deplorable financial condition, brought about by local conditions, but in a large majority of instances those roads are owned by parent roads. For instance, we will take the Gulf, Colorado & Santa Fe, owned by the Santa Fe proper. I understand that the Santa Fe proper owns practically all the stock of the Gulf, Colorado & Santa Fe, and it may be there is a widow here and there to talk about, and there may be an orphan who owns fifteen cents worth, but the great mass of stock of the Gulf, Colorado & Santa Fe is owned or was owned until quite

recently by the Atchison, Topeka & Santa Fe Railroad. Now, it may be that the Gulf, Colorado & Santa Fe might be shown not to be a very profitable feeder for the Atchison, Topeka & Santa Fe road, and in the divisions of the return from freight traffic and passenger traffic, the people who control the Santa Fe proper control the Gulf, Colorado & Santa Fe, and can make divisions to suit themselves, unless interrupted by that bugaboo, the State Railway Commission of Texas.

A number of railroads in the West in 1914 showed a deficit in current income after the payment of operating expenses and capital charges. Eliminating those railroads which had been dangerously weakened by financial mismanagement and those which are subsidiaries of prosperous systems, less than one per cent of the total mileage of Western Railroads engaged in the present proceedings were operated in 1914 at a deficit after the payment of fixed charges.

Fifty-three Western Railroads during the fiscal year 1913, the last year for which time was available to make computation, earned 7.78 per cent on their total capital stock outstanding, whether it had been issued with or without consideration in property or earning values; ten of the leading companies of the West, during the same year, earned 9.66 per cent on their total outstanding capital stock.

Hidden assets of immense value are in the possession of certain Western Railroads, but do not appear on their books at their real value, such as timber, oil and mineral lands of the Southern Pacific Company, which have been estimated to have a market value of \$700,000,000, and which are reported with a book value of only slightly more than \$40,000,000; also the timber holdings of the Northern Pacific and Santa Fe Railroads, which are worth between \$50,000,000 and \$100,000,000, but which are not reported among the assets of these companies.

So far as any Western railroads find themselves in a weakened financial condition now as compared with past years, it can almost invariably be traced to the inevitable result of past mismanagement of their finances. No Western railroad, that had been properly managed and operated, or that had been protected with true economic judgment and foresight, was insolvent during the past fiscal year.

And now before closing that subject, I desire to say that

has been offered in rebuttal, not so much to the testimony here presented, but to the continuous campaign conducted by the financial managements of railroads to convince the public that the railroad employes, and not Wall Street, are to blame for the present financial condition of railroads.

Maintained at the city of Washington at the expense of the railroads, is what is known as a Bureau of Railway Economics. That Bureau has been grinding out bulletins for the past five years for a twofold purpose, one that freight rates should be increased, and next that wages of employes should be decreased. Whether they have dwelt more forcibly on the increase of freight rates or the decrease of wages of employes is hard to determine. But we have got to the point, gentlemen, that in order to hold our own we have got to defend ourselves, and this is our defense against this method of educating the public that railroad employes are the sole cause, or even an indirect cause of the present financial distress of railroads.

We now come to the outlook for the future. Without being prophets or sons of prophets, we have the right to at least estimate the future as much as have the railroads.

The increase in gross and net revenue and net income shown by leading Western Railroads during the period 1909-1914, represents a gain which has been made in the face of conditions highly unfavorable in many respects to general industrial and commercial activity. Significant as are these increases in revenue and income, they cannot be considered as representative of the degree of expansion to be expected in the earning capacity of Western Railroads under favorable conditions with freedom from disturbing influences which have adversely affected practically all branches of trade and industry during the entire period under consideration.

The indications now are that the worst effects of the recent financial and industrial breakdown caused by the European conflict have passed. It is true that, owing to the immense destruction of capital and the demand for it which will arise when the European war terminates, that interest rates and the cost of borrowing capital may be higher. This will be a condition which will have to be faced by all industrial enterprises as well as the railroads. On the other hand, there are certain foundations for optimism which pertain strictly to railroads, and which will

undoubtedly be the basis of an era of prosperity. A pronounced upward trend is clearly evident in railroad affairs. The reasons for this statement may be briefly summarized as follows:

There has been a favorable change in the attitude of the Federal government, state regulatory authorities, and of the public toward the question of increased freight and passenger rates as well as toward the entire railroad situation.

There has been a marked recovery from the crisis precipitated by the breaking out of the European war, as evidenced by the great expansion in the country's foreign trade which, in a large measure, is the underlying basis of prosperity.

A rapid improvement in business conditions in the United States in 1915 is predicted by men in close touch with the financial and industrial life of the country.

Statements put out by railroad officials summarizing the results of operations since the close of the fiscal year 1914, indicate that Western Railroads are already feeling the effects of returning prosperity.

A resumption of industrial activity and the restoration of prosperity is indicated by the expansion in the lumber industry in the Southwest and in the Pacific Coast States; in the increased output of copper mines in Michigan, Arizona and Montana; in the resumption of cotton exports on a large scale; and in the primary movement of grain to Chicago and other centers of distribution.

The upward trend in trade and industry which set in during the closing months of 1914, extending to practically all sections of the country, will be influenced by the improved conditions which will follow the resumption of activity in the manufacturing and industrial centers of the Eastern and Southeastern States.

There has been a rapid and steady improvement in the investment market.

The monthly reports of the Western Railroads as to earnings and traffic, clearly indicate a constant upward movement towards normal conditions. A few railroads show higher revenues now than for the corresponding period last year; the others range from 3 to 10 per cent below normal as compared with a year ago. Practically all indicate, however, a steady

progress during the recent months in recovering from the depressed conditions of the late summer and autumn.

I shall not read the citations. They are placed there with the expectation that they will counteract some citations that will be read by the other side.

I would like to read from yesterday's Tribune. It may be worth a great deal or it may be worth nothing. I get it for what it is worth:

"New York, March 28.—[Special.]—In the week just ended the sound that came from the stock ticker was the busiest that has been heard from that instrument since the end of last July. At that time prices were crumbling in anticipation of the European war and world wide closing of stock exchanges.

"The market of the week just concluded was by far the broadest that has been witnessed since July 30. Instead of declining, however, prices were climbing. Traders suddenly appeared on the floor who have not been seen in Wall street in months. Many new as well as old faces appeared in the customers' rooms of brokers' offices. On all sides the belief was expressed that the bull market which was checked six weeks ago by the blockade controversy with Germany was again under way.

"Wall street is decidedly bullish. A year ago at this time Wall street brokers were scratching their heads to find an explanation for the heavy gold shipments to Europe, which were upsetting our markets. Today those same bankers are rubbing their hands gleefully at the gold that is being drawn to our shores from every corner of the world.

"A year ago Europe was mysteriously taking our gold at a heart-breaking rate in anticipation of the rapidly approaching war. To balance their accounts with us, England, France, Russia, Belgium and Germany, especially the last named, parted with their investment and speculative holdings of American railway and industrial stocks. Today all of the countries named are buying either foodstuffs or war supplies or both and settling with gold or credits or I. O. U's.

"EXPORTS WITHOUT PARALLEL.

"According to the week's figures from Washington, during the month of February the excess of exports over imports amounted to \$173,000,000, which was \$100,000,000 more than any previous February. During the three months since December 1

we have sold to the world \$552,919,000 more merchandise than we have bought. That movement is without a parallel in our history.

"As a result of our heavy merchandise exports, since January 1 we have obtained \$2,250,000 worth of gold from Japan, \$300,000 worth from Denmark, \$1,000,000 from South America, \$1,000,000 direct from London, \$25,000,000 from the Bank of England through Canada. Including the last week's record shipments, \$40,000,000 gold has been added to our bank accounts since the turn in the tide occurred early this year.

"Last November we shipped out of this country, mostly to Europe, \$14,526,000 gold; in October we lost \$50,301,000 of the yellow metal; in September, \$21,887,000; in August, \$18,125,000; in July, \$33,669,000. Instead of losing gold, as was the case practically all of last year, we are now gathering it in from all parts of the world at a rate never before witnessed.

"BIGGER TRADE BALANCE DUE.

"According to trustworthy advices, March will show a much larger trade balance than February, just as February has shown a gain over January, and January showed an increase over December. Additional evidence of our growing financial strength can also be found in the \$15,000,000 loaned last week to South America and the pending loans of \$250,000,000 to England and \$50,000,000 to France.

"It is only a question of a short time until the foreign trade and financial boom will produce country-wide prosperity—that is, unless we are unfortunate enough to become involved in the war. That does not seem likely. R. L. B."

Mr. Chairman, in closing the opening argument and in the presentation of this brief, I desire to thank all the members of the Board for their kindly patience during these months of the proceedings. We recognize that the parties at interest were so extremely interested that the time did not weigh heavily upon them. I realize, however, that it must have taxed the patience of this Board to have sat here so long, listening to so much that has been presented by both sides, and I thank you.

The Chairman: We will take a recess for fifteen minutes, and then we will hear Mr. Sheean.

(At this point a recess was taken for fifteen minutes.)

ARGUMENT OF JAMES M. SHEEAN ON BEHALF OF
THE RAILROADS.

Mr. Sheean: May it please the Board, in the brief filed on behalf of the Railroads we have endeavored first to outline the issues as made by the opening statement of Mr. Stone, indicating the basic propositions on which the employes rest the request for a general increase in compensation. These issues we have taken up and discussed seriatim, and then we have discussed each of the articles separately, and have endeavored to make our brief a topical index, that will serve, by reference to the record page, to give the Board information as to the testimony in support of the position taken by the Railroads with reference to the separate articles.

Now, before presenting the issues made by the opening statement, I think it is proper that I should say that the concluding portion of Mr. Carter's opening address has cleared up one matter as to which the Railroad Companies, or at least the Conference Committee of Managers, have always been in doubt.

I said in the opening statement on behalf of the Companies, substantially, that I had esteemed it a great privilege to have been associated with a committee consisting of men who had come up through the ranks, men who had approached the entire proposition in the good faith effort of ascertaining whether or not the men were fully, fairly and adequately compensated. There never was a suggestion by this Committee, and never has been a suggestion in the presentation of the case, that whether or not the railroad companies had been properly or improperly financed, whether railroads were, as suggested in some of the exhibits filed, controlled and dominated by certain groups of bankers, or whether in fact the earnings of railroad companies went to the payment of the widow and orphan so well known in discussions of this character, or whether they went to the payment of dividends or interest upon bonds held by savings banks, made any difference whatever in the ascertainment of the proper, fair and just amount to be paid to employes. No point has been made by us at any time, no suggestion has emanated from the Committee, that wages should be decreased or diminished by the ownership of stock by any particular person or group of persons. Our good faith effort at all times has been

to ascertain whether these men are fairly treated, whether they are fully paid; because it was and at all times has been the attitude of the Committee for whom I am now speaking, that these men have responsible duties to perform, that these duties have been fully performed, and that it is the desire of the railroad companies that their compensation should measure up not only to the mere physical labor that may be involved in their tasks, but should measure up to and pay fully and fairly whatever there be of risk, of responsibility, of skill that is incident to and part of their regular employment.

But there must be a starting point in the discussion of this case, a starting point from which we are to measure whether or not an increase is justified at this time.

Now, the issues as made by Mr. Stone in his opening statement at page 40 of the record, were stated to be that—

“In presenting our case, we shall hope to show by our witnesses the changed conditions under which they work and the present requirements, as compared with the conditions in effect when the present schedules were agreed upon. * * * These developments have had a threefold effect on the engineers and firemen: (1) Increase in their labors and responsibilities, (2) their productive efficiency has been greatly increased, (3) their earning capacity, even at the slightly increased rates of payment they have received, has declined.”

Now, it is in evidence here that under date of June 4, 1910, the present wage scales of firemen were determined by an arbitration award in a concerted movement. Under date of December 24, 1910, the present wage scale of engineers was fixed and determined.

Therefore where the predicate underlying the claim for increased compensation is a change in working conditions, a change in productive efficiency, a change in labor and responsibilities, we must, as it seems to us, take the concerted movements of 1910 as the base with which to make comparison. It seems to me that this position would not only be one to which neutral arbitrators would be driven in the absence of the peculiar situation with which we are here confronted, but as one that we cannot escape from in view of the manner in which the issues in this case were made up.

On the tenth of October, 1913, the railroad companies were

notified by the organizations of a desire to have incorporated in the schedule the sixteen Articles which are now in arbitration. Concurrently with the receipt of that notice, each of the Railroad Companies served upon the Organizations a notice of their desire to terminate the schedules so that each and every item of compensation within them might be open for consideration and discussion in connection with the requests made by the men.

Now, if your Honors please, the purpose and object of this notice by the Railroad Companies was in order that there might be a step toward uniformity, toward the standardization that Mr. Carter spoke of in his opening statement. The Railroad Companies are willing to meet the Organizations upon the proposition of standardizing, and in order that there might be open the question of the elimination of a rule devised upon one road to accomplish a particular result and to substitute therefor the general rules of universal application, such a notice was absolutely essential.

As Mr. Cadle frankly stated when on the stand, and reference is made to the record page where this statement is made, a rule that may appear to be a mere service rule in one schedule often works out as a compensatory rule, and therefore it was the desire of the Railroad Companies that there might be some effort made toward actual standardization.

But, as a condition precedent to arbitration, and therefore as a part of the contract under which this Arbitration is being held, it was specifically stipulated and provided that the schedules in force on the 10th day of October, 1913, prior to the service of this notice by the Railroad Companies should be restored and remain in effect for the full period of the award, except as modified by the award. In other words, the Organizations by this form of contract, and by their insistence upon that situation, made these schedules the starting point with which to make comparison. They were then unwilling to go back to 1890 or 1900, or any other time that they now seek to do by Mr. Lauck's exhibits, to make comparison with the growth and development and the consideration of the question, the general question of general equity and general fairness.

But by their own insistence, 1910 must be the starting point. The issue was of their making, the issue was of their insistence, and the opening statement is that they would show changed con-

ditions (1) in their labors and responsibilities, (2) in their productive efficiency, and (3) in their actual earning capacity.

Now, we direct attention in the brief to the conclusion which was reached by the Honorable Seth Low and Dr. John H. Finley, in the Eastern Trainmen's case, decided in November, 1913, upon the question of the necessity of starting with the settlement of 1910, and in the brief we quote from the conclusion there reached. Because as it seems to us, it would be inevitable that arbitrators must take the starting point of the last concerted wage movement as the time, place and situation with which to make comparison, independently of the fact that in this particular case the form of arbitration agreement substantially makes that the starting point with which to make comparison.

Now, we have then taken up for consideration the question whether or not, on any one of these propositions, the employes have sustained the burden of making the proof essential to establish any one of these three propositions; and because, in addition to the three propositions which were stated by Mr. Stone in his opening, there is also in the brief filed, as well as in the evidence introduced, a claim made upon the fourth point of increased cost of living, during this period of time.

Beginning at page 4 of the brief, we take up for discussion this general question of productive efficiency. Now, this somewhat elusive term is used in a variety of ways in different parts of the discussion. At times, and at the beginning, it seemed to be Mr. Lauck's idea that productive efficiency, yielding an added return, has been profitable, and if labor has any ground, through increased work or increased hazard, or increased responsibility, or inability to earn as much as before, on the basis of even increased rates of compensation, they should participate to some extent in this increased productive return. Mr. Karn, however, in discussing the oil burning engines, takes the position that increased productive efficiency means the output of the machine, independently of any change in responsibility, duty or even contribution to the output of the plant as a plant.

Now, as I stated a few moments ago, the wage scale of engineers and firemen is predicated, not merely upon the physical labor; it is, and at all times has been predicated upon, not mere labor, but upon a proper appreciation of the fact that there are inherent to the nature of their business, duties and responsibil-

ities which are essential in considering a fair wage, and, therefore, if there has been in the last three years an increased and added burden measurably appreciable, either in added labor or in added responsibility, it is a proper item for consideration in determining a wage scale.

An interesting economic problem here might be presented in a case in which the so-called productive efficiency that Mr. Lauck talked about was really involved in the period under consideration. It might be very interesting to try to allocate to labor and to capital and to managerial efficiency, just what were the respective contributions of each of these items that made up the general increase in productive efficiency. But we need not go into that question at all in this particular case, if our premise be sound, that the issue here is whether there has been a change in the last three-year period in this productive efficiency. Because Mr. Lauck's own tables show that during the last period, during his period from 1909 to 1913, adopting his formula, which we do not believe is sound, he proves by his figures an actual decrease in productive efficiency during the last three-year period. Now, of course, you all recall that he started out during the period of 1890 to 1913, with taking what he called traffic units, a ton mile in freight service being equivalent to a passenger mile in passenger service, and he carried out in a most graphic manner here, this combined traffic unit through the period, and showed that, as compared with 1890, measured in terms of \$1,000 compensation to engineers and firemen, the traffic unit was greater in 1913 than in 1890. Then he took in his Exhibit 22, the next period from 1900 to 1913, and measured in traffic units, he still showed an increase. But the last one of his exhibits, taking the period from 1909 to 1913, did not carry out the traffic unit, but it carried out only the freight unit, and Mr. Lauck frankly admitted that if he had continued to combine the two during this last period there would be an actual loss; but he is still able to hang on to about 4½ per cent increase in productive efficiency as shown in Exhibit 23, by allocating in an arbitrary way to freight earnings, only the part of the switching expense which the passenger miles bear to the entire miles made by the system. In other words, every practical railroad man, of course, knows that to allocate the passenger, the expense of switching, the same proportion of

switching expense, which the mere passenger miles bear to the freight miles, is carrying over to passenger service six or eight times the proper amount that should be carried in the way of expense against passenger service. But, by thus carrying it over and thereby showing that passenger service has been greatly decreasing in productivity during this period, he is still able to show, on page 3 of Exhibit 23, that during the last three years' period for ten Western Railroads, 1909 to 1913, ton miles per \$1,000 compensation to freight engineers shows an increase of 4.68 per cent and ton miles per \$1,000 compensation to freight firemen, an increase of 4.55 per cent.

Now, Mr. Lauck frankly stated that this was measuring in terms of firemen and engineers all of the increased productivity of the plant as a plant. He had made no effort to assign to capital or to labor, or to managerial efficiency, any part or portion of this increased productivity during this period of time. And he frankly admitted that, reaching this conclusion of 41 $\frac{1}{2}$ per cent increase in freight productivity during this period was only accomplished by his assignment to passenger service of the expense of switching, which showed a decreasing productive efficiency in passenger service during that time. Therefore, while we do not for one moment wish to be understood as giving assent to the correctness of Mr. Lauck's theory, that you can measure productive efficiency of firemen or enginemen in ton miles, we need not go into a discussion of why and wherefore that is unsound, in view of the fact that if we accept his formula, his formula during the last three-year period brings about only this conclusion of 41 $\frac{1}{2}$ per cent increased efficiency in ton miles, by the combined contribution of labor, capital and all other elements that enter into that saving.

You will recall that yesterday, Mr. Carter, in speaking of the ton-mile comparison, said, "But the locomotive mile or the train mile is what measures the fireman's work."

About that, there really can be, I think, no serious debate; that the matter of what ton miles there may be in a train, what the loading of a car or what the loading of a train may be, is something that neither the engineer nor fireman has any reasonable opportunity of making any contribution to, to regulate or control in any manner. And as stated in the brief, if this be the situation as shown by his own exhibit, it is probably unnecessary

to go into a discussion of the correctness or incorrectness of the formula which underlies it.

Now, there was presented here this morning by Mr. Carter in connection with the productive efficiency argument, also, toward the latter part of his argument, a reiteration of the claim made that through this productive efficiency there was available for distribution this large sum of \$50,000,000. On page 80 of his brief the statement is made:

"An analysis of the operating and financial performance of forty-three representative Western Railroads, considered as one system, during the period 1909-1913, showed that after the payment of all increases in costs of operation, and after allowing interest at 4 per cent per annum for expenditures for additional property during the same period, that there was a balance remaining to compensate the increased productive efficiency of locomotive engineers and firemen and other labor of \$50,541,129."

Now, again we find that Employees' Exhibits 28 and 29 on this question of increased revenue gained from operation, make comparisons for the years 1890 to 1913 and 1900 to 1913, while Exhibit 39 does not make the comparison for all of the railroads involved. Therefore, it being as it seemed to us a somewhat significant omission, we have caused to be carried out at page 11 of our brief Mr. Lauck's own formula for this last period, covering all of the railroads which he shows in his exhibit.

Mr. Lauck's 43 selected railroads, which are referred to at page 80 of Mr. Carter's brief, and which show this increase of \$50,000,000 available, if applied to all of the Western railroads during this period of time, show that in fact there was absolutely no revenue gain on the 62 railroads.

In this reproduction, if your Honors please, we have simply taken Mr. Lauck's own basic tables. Reference is given to the place from which these figures are obtained, derived from his own tables, applied to all of the 62 railroads which his exhibit contains, except those where the data were not complete for the entire period. Those are the Canadian Northern, the Chicago & Eastern Illinois and other roads, named at about the middle of the Exhibit, which had to be deducted from the total.

This shows that 1913 over 1909 showed an increase in the operating revenues of 20 cents per train mile; but it shows that

during the same period there was an increase in the operating expense of 20 cents per train mile, absolutely no gain whatever in revenue, notwithstanding the fact that Mr. Lauck's own exhibit shows that during that time the road and equipment had increased in cost to the railroad companies to such an extent that, even though you allow only his 4 per cent on the additional capital admittedly going into the road, there was an actual revenue loss of 58 cents per mile.

At page 13 of the brief, we apply his same formula to the 43 Western railroads for the three-year period. Again we resort to Mr. Lauck's own basic table; and this statement, made at page 80 of Mr. Carter's brief, showing a surplus of \$50,000,000 available to compensate the increased productive efficiency of locomotive engineers and firemen, if applied to the three-year period, shows a complete disappearance of his alleged \$50,000,000 and a substitution for it of a deficit of \$298,000.

Now, in other words, if the Board please, without for one moment giving any assent to the propriety of the deductions which he makes, without assenting for one moment to the theory that you can measure the productive efficiency in ton miles, or in revenue gains, we have simply here reproduced his own formula to show the absurdity of basing any deductions thereon, by simply bringing it down to a comparison of the three-year period instead of the five-year period which is covered in his exhibit. The alleged surplus, the alleged revenue gain of \$50,000,000 is totally wiped out, and in the last three-year period an actual loss in revenue gain of \$298,000 is substituted therefor. In other words, it simply illustrated what the Interstate Commerce Commission said in the Eastern 5 per cent case, that the selection of a particular period of five years, or three years, and a comparison for one or the other, will lead to almost any kind of a conclusion that a statistician may have in mind at the time that he selects his particular period.

And we are not offering this as proving anything. We are simply offering this reproduction of the table to show that if Mr. Lauck's theory be accepted at 100 per cent, and apply it to the theory in question, that he proves during the three-year period an actual loss in revenue gain.

Now, of course, it must be admitted—of course it was frankly admitted, that the fiscal year 1909 began on the 1st day of

July, 1908. He takes that as the basis of his comparison, in his five-year comparison. It must be admitted that the situation on June 30, 1908, has but little relevancy in making the comparison, with the situation in December, 1910, half way through the fiscal year of 1911, or for comparison with July 4, 1910, which is into the fiscal year of 1911, because fiscal years with which comparison is made, end on June 30th of each year. Therefore, if we apply his own formula on this question of revenue gains to the three-year period, the data being obtained from his own statistical table, we reach the conclusion that his own formula, applied to this period, shows an actual loss in productive efficiency.

But, as I said at the outset, if your Honors please, I cannot follow, the Committee that I represent cannot follow or pretend to follow through the intricacies of a hypothetical suggestion that the compensation of engineers or firemen should in any manner be influenced or measured by ton mile comparisons or revenue gain comparisons. We can, and do follow them in the suggestion that any increase in labor or responsibilities of engineers or firemen, reasonably measured, reasonably ascertained, should find reflection in a scale of wages. And as it seems to us, the whole question of productive efficiency, in its last analysis, comes down to the simple question: Has there been a change in labor or responsibilities of the engineer and fireman during the period under discussion? Because it can make no difference to the engineer and fireman whether that change in labor and responsibility is productive of ton miles or is productive of revenue gains; if, in fact, his labor has been increased, even though it be for mere economy, not for revenue gain, such increase, such addition, if tangible, should be reflected in his compensation.

Therefore, if productive efficiency is merely a statistician's term, reasonably interchangeable, with a suggestion of changed duties or changed responsibilities, of being given a better machine with which to work, but in connection with that machine requiring either higher skill, greater responsibility, greater labor, on that theory, I can reasonably follow the arguments and endeavor to ascertain whether or not proof has been made of a change in burdens or responsibilities that has not been compensated for in the wage scale.

Again, Mr. Lauck said on this branch, that as to the changed

labors and responsibilities of firemen, he could see a reasonable connection between the additional amount of coal that would be consumed, because with the added burden on the train, the larger engine, there would be a larger amount of coal to shovel. In fact, he stated specifically, record 2381, that by taking the coal-burning roads and showing the coal consumption per \$1,000 outlay to engineers and firemen, would be a fair comparison between the years 1909 and 1913. And so, while he was upon the stand, acting upon this suggestion, we took nineteen coal-burning roads, burning nothing but coal, and submitted to Mr. Lauck the statement of fact made in his basic tables as to these nineteen railroads, and at pages 16 and 17 of the brief we set out this same detail, which showed that upon these nineteen railroads there was between 1909 and 1913 an increase of 26.39 per cent in the coal consumed, but during the same time there was an increase in the wages paid firemen of 31.91, or following Mr. Lauck's own formula, and reducing it to terms of compensation, the tons of coal burned per \$1,000 paid firemen, were 2.28 in 1909 as against 2.18 in 1913.

In other words, with the increase in compensation granted in 1910, where a line of demarcation was made upon engines of a certain size, taking a higher rate, these figures show, as I believe, that with the installation of the higher power, the fireman for each ton of coal he shovels receives a larger sum of money than in shoveling the coal upon the smaller engine.

Now, that is further corroborated by taking Mr. Lauck's Exhibit 20. In order to ascertain just what the coal consumed per locomotive mile in the two periods was, we have taken this up. There has been a lot of loose general talk about the fact that with the loading of the train the locomotive consumes more coal for each mile it runs, because it is more heavily loaded. There is no question about that, speaking in a general way, as to the appliances, equipment and other things remaining the same, that the larger engines will burn the greater amount of coal. But these gentlemen apparently overlook the fact that the larger engines took a higher rate of wages. These gentlemen apparently overlook the fact that since 1910, as each of these larger engines was installed upon these roads, it found waiting for it a higher rate of pay; for each locomotive mile run,

on the larger engines, the fireman receives more money than he did on the smaller engines.

Now, has this larger sum of money which he thus receives, kept pace with the increase in his burdens? We again resort to Mr. Lauck's tables, and reproduce at page 18 of the brief the totals of the computation showing the increase from 1909 to 1913, in the fuel consumed per locomotive mile, and in the compensation to firemen per locomotive mile. We give a reference as to the part or place in Mr. Lauck's basic table where that information is contained. And it is shown, if your Honor please, that it is true, there is no dispute upon the part of the railroad companies that, speaking generally, there have been provided larger engines in through freight service on main lines to take the place of the smaller engines. It is true that these larger engines, generally speaking, burn more coal in the same distance than the smaller engines. But it is also true that these larger engines take the higher rate of pay. And, so, an analysis of all the roads that burn coal exclusively, or oil only in negligible quantities, shows that between this period the coal consumed per locomotive mile increased from 150.09 pounds to 163.91 pounds in 1913.

But the same exhibit shows the average compensation to firemen per locomotive mile on these roads was 3.19 per cent in 1909, and 3.69 per cent in 1913.

And so we say that, so far as any proof has been made in this case, we need resort only to the basic statistics introduced by Mr. Lauck to show that, in truth and in fact, the differentials established in 1910, or the differentials which existed before that time in the various schedules, based upon the larger engines taking the higher rates of pay, brings about the practical result, that on these larger engines the rate of pay provided for them is more in its differential between the rate of pay on the smaller engines than is the difference in the actual labor of the fireman.

Now, it should not be overlooked, if your Honors please, that in all of these schedules, as shown by our Exhibit No. 1, and as agreed to practically by all the testimony here, that, speaking generally, the larger engines take a higher rate of pay, whether measured by cylinder or measured in other ways. There have been and are now, as shown by this exhibit, graduated steps in the rate of pay of the engineer and fireman based upon an agreed

local classification as to what change in power, size or dimensions, agreed upon by the men, reasonably measured the changed responsibility of the men or the changed labors of the men as they went from one to the other of these engines. And I submit that the figures introduced here demonstrate conclusively that these differentials thus established and now existing in these various schedules, practically bring about the result that a change from the smaller to the larger power not merely brings about an absolute change in the rate of pay of the person going from the smaller to the larger engine, but, concurrently with it, it brings about a change whereby the fireman on that larger engine is receiving more per ton of coal he shovels than the man upon the smaller engine is receiving for shoveling a like amount of coal.

I think we illustrate the point I have in mind at pages 19 and 20 of the brief, where we take the assumption that an engineer goes out today from a terminal on an engine that takes a \$4.95 rate. You will find in many schedules a \$4.95 and another \$5.45 rate. Assume that he goes out in one direction on this engine which takes the \$4.95 rate and comes back the next day over the same division, but in the other direction, on an engine taking a \$5.45 rate. Now, what tangible proof has been introduced in the record in this case by which to enable this Board to determine whether this \$5.45 rate fully measures up to, or even beyond, as we claim, the change in responsibility or the change in labor as between the outgoing and the incoming trip? Or, take the case of a fireman, not merely the case of going out on an engine taking one rate and coming back upon another, but take the situation of the fireman, who was drawing a rate of \$3.10 up to six months ago; \$3.10 is a well-established rate in these schedules. Six months ago, that particular railroad changed its motive power on that particular division; heavier motive power came on, motive power that weighed 215,000 pounds on drivers, which is the only uniform breaking point here in this Western territory as to both engineers and firemen. Now, since six months ago the fireman running on this engine of more than 215,000 pounds on drivers has been drawing \$3.75 for each hundred miles. Is there anything in this record which will enable this Board to say that the change from \$3.10 to \$3.75 has not fully and adequately measured the change in responsibility

which came with the change from the smaller to the larger power?

In other words, the situation with which this Board is confronted is that in 1910 both the organizations and the railroads foresaw the gradual substitution of larger for the smaller power in through freight service, and provided a differential therefor, so that when and as and wherever there has been a change from a small to a large engine in this territory, I mean beyond the agreed breaking point of where the rate changes in the different schedules concurrently with that change, the fireman and engineer going out on that larger engine have received a greater rate of pay. And this Board has not before it a syllable of evidence by which to ascertain and determine whether or not this man, running at a \$3.10 rate up to six months ago and running at a \$3.75 rate the last six months, has, by this \$3.75 rate, received an increase which fully measures up to the changed responsibilities which came with the change of motive power.

Now, before I go along, let me say that at any time in connection with any of the matters that I state and present here, I will appreciate it if the Board will ask me any questions they desire, if I do not make myself perfectly clear as to the point I am trying to develop; because my only purpose in making this argument is not to make a speech, but to endeavor to aid the Board in following, so far as I can aid them, the line of argument that is presented in the brief.

The point that I make upon this proposition may be stated simply thus:

Larger engines, generally speaking, burn more coal than smaller engines having the same equipment with reference to labor-saving devices. We all agree that larger engines take a higher rate of pay. That fact these gentlemen seem to have overlooked, that a higher rate of pay is provided for in all these schedules. Therefore, proof that larger engines have been gradually installed, and the average increased during the last three-year period, proves just one fact and only one fact. It proves that, generally speaking, and from day to day and from month to month, when these changes have been made, the men have been receiving a higher rate of pay than they were receiving three years ago; and because of the change from a smaller

to a heavier class of power, contemporaneously with it there has gone into effect a higher rate of pay.

The Chairman: Under the present schedule, where does the break begin?

Mr. Sheean: The only one that is uniform in Western territory as to weight on drivers is 215,000 pounds on drivers. Below that point these schedules have been a matter of mutual arrangement, usually on size of cylinder, a rate fixed at a certain amount, based on cylinders of certain size. Others, so far as the schedule shows, are simply a named class of engines, the Mikado and various other types and styles that are understood by the men upon the different lines of railroad. Now, these breaking points, your Honor, have been developed by mutual agreement between the men on the several railroads, as to just where the breaking point would be.

The Chairman: And as to the weight on drivers, the breaking point begins 250,000 pounds?

Mr. Sheean: At 215,000 pounds. By the concerted movement of 1910, in the Arbitration of that year, the arbitrators in that Award provided that all engines having more than 215,000 pounds should be paid a certain amount higher than the next highest rate on that road.

The Chairman: And the rate on the engines below that weight was to be determined on the cylinder basis, was it?

Mr. Sheean: Very largely, yes. Now, the men on a particular road might have a type of engine in which the cylinder dimensions might be a little bit more or a little bit less than the cylinders in the type of engine generally in use upon another road. Therefore, there might not be absolute uniformity at a particular size of cylinder, because the equipment on one road might differ slightly from the equipment on another. But, speaking generally, below this 215,000 pounds, which was made universal for the entire territory, there are a number of breaking points and breaking steps in the schedules of the different roads, all in the end, of course, designed to give recognition, on any particular line, to a change in duties or responsibilities of the engineers, generally harking back to the proposition of the increased size of the engine.

The Chairman: Now, upon what theory was the cylinder

basis adopted? What did the arbitrators have in their minds at that time?

Mr. Sheean: I was coming to that a little later.

The Chairman: All right. Then you need not take it up now.

Mr. Sheean: I am very glad to take it up now. I discuss that under Article 1.

The Chairman: I want to get that clear in mind.

Mr. Sheean: In the Eastern Arbitration case, Mr. Worthington, as suggested here by Mr. Carter, took the position, and I think all railroad men practically agree, that tractive effort really measures what a locomotive will do. In order to measure tractive effort with approximate correctness, some reasonably convenient means, known to both the men and to the company, about which there will be no dispute, has been accepted generally as having a reasonable approximation to tractive effort. Now, the tractive effort is determined by formula prescribed by the Interstate Commerce Commission. I am not sure that I can state it correctly. Mr. Stone will be able to call me on this if I state it wrong; but it is the square of the diameter of the cylinder multiplied by the stroke of the piston—I need not go any further—

Mr. Carter: You are doing finely.

Mr. Sheean: Multiplied by the mean effective pressure and divided by the diameters of the drivers, I think. I started to give the formula, and stopped at this point simply for the reason that one factor in determining tractive effort is the diameter of the cylinder. That is, it is one of the important factors in determining tractive effort. And as Mr. Stone in the Eastern case said—I thought I could refer to just what he said, but his position was—that because of the size of the cylinder being one very important element in determining tractive effort, he thought that was a more satisfactory way than the weight on drivers basis. Now, it is generally agreed that either the one or the other in a rough way approximates the question of what the tractive effort is. Both have inconsistencies in them, there is no question about that. Neither one measures absolutely and at all times the tractive effort.

Now, as Mr. Trenholm indicated here, there is not any particular disposition on the part of the railroads to question either

the one or the other, if they will let us take one or the other. In this particular situation here, we find that, taking the case of Mr. Keefe's oil burning engine, which took a \$2.50 rate up to the Arbitration of 1910, by reason of having excessively large cylinders it took a \$3.75 rate. Now, these gentlemen come in with an exhibit showing their great conservatism in this movement, in reducing it to a basis of weight on drivers, even at the exaggerated amount they ask for here, that particular engine, measured on a weight on driver basis, would only take the rate of \$3.25. Therefore, they say, that is a mark of their great conservatism here, because in the weight on drivers basis they are only asking here \$3.25, where some of the roads are now paying \$3.75; but in the saving clause they say "We want to hang on and will hang on to that \$3.75 rate, obtained on the cylinder basis. That \$3.75 will be insisted upon, and wherever we can find that on a cylinder basis, applying the other approximate method of arriving at tractive power, namely, a weight on drivers basis, we can get a still higher rate than the cylinder basis would give us, we will combine that."

Mr. Trenholm indicated here that so far as the railroads are concerned, if they will accept the one or the other, and have that method exclusively applied, there is not any great objection to either the one or the other. Both measure with approximate correctness, and in a general way, the ability of the engine in tractive effort. But what is objected to here is that these gentlemen, through all these years, up to and including 1910, have applied a schedule measuring their pay on the cylinder basis, so that when the size of the cylinder changed they took a higher rate of pay, and now propose not to transfer it over to a weight on drivers basis, wiping out all distinctions based on a cylinder basis, but they say "No, we will hang onto this wherever it gives us a higher rate than the weight on drivers would give us, and we will go over to the weight on drivers for the sake of picking up whatever we can on that method, too." Now, that is the practical objection, from the viewpoint of the management, to this particular proposition.

Mr. Nagel: Was there any reservation made in submitting their case in the Eastern Arbitration?

Mr. Sheean: Any reservation?

Mr. Nagel: Any reservation of rules and conditions and wages similar to the one in this case.

Mr. Park: You mean any saving clause?

Mr. Sheean: Oh, yes.

Mr. Nagel: In the Firemen's Arbitration the weight on drivers was adopted?

Mr. Sheean: Yes.

Mr. Nagel: In the Engineers' Arbitration there was no such provision?

Mr. Sheean: No, they simply fixed a minimum?

Now, of course, in the Firemen's case the basis was fixed on weight on drivers, and that Award provided—I will not attempt to quote it—that you could not select a particular rule and combine it with a particular rate; and the Award in the Eastern Firemen's case would make it possible, in carrying out that award as I view it, to take a particular rate based on diameter of cylinder in a particular schedule, and then combine that with some schedule for other rates and rules which were fixed upon a weight on drivers basis.

Mr. Nagel: Apart from the manner in which they solved it, what I want to ask you is, is it desirable to have a uniform basis in the two territories, East and West, or is it immaterial?

Mr. Sheean: Why, I think that if they would combine the rates and rules and other things that go with it in the East, the Western Railroads would probably not have any very serious objection if they adopted the Eastern schedule. But with the division of weights on drivers, unless that was merely one thing in connection with all the other conditions of the schedule, I do not think it would make particularly toward uniformity. I think the position here and at all times has been that if it was more satisfactory to the men to go to a weight on drivers basis, and to make it really a weight on drivers basis, the managers had no particular objection. Both methods have certain inequities here and there, but it should be the one or the other.

Mr. Nagel: You think that in practice it would be desirable to have the same basis throughout the country, but that practically it is hardly possible now?

Mr. Sheean: Yes, I think that is the situation. I think anything that makes toward uniformity is extremely desirable. That was the purpose here, in the hope and effort that we might

do that, if we were permitted to make a step in the direction toward uniformity.

The Chairman: At this point, Mr. Sheean, we will suspend.

(Whereupon, at 12:35 o'clock P. M., a recess was taken until 2:30 o'clock P. M.)

AFTER RECESS.

The Chairman: Proceed, Mr. Sheean.

Mr. Sheean: May it please your Honors, before adjournment I had taken up in a general way the first two basic propositions which were stated in the opening as underlying the claim for increased compensation, and had called attention to the fact that in our brief, on the question of productive efficiency, it was shown by the table appearing at page 11 that during the period from 1909 to 1913 there was, in fact, no gain in operating revenue on the train mile basis, irrespective entirely of the question of the increased cost or additional contributions of capital during that period; that Mr. Lauck's own figures demonstrated that if his yard stick be revenue gains per train mile, that the increased cost per revenue train mile had commensurately kept pace with any increase in revenue, so that the net result in 1913 was no better than in 1909, and this notwithstanding the fact that during that period of time, as shown by his own exhibits, there had been a vast amount of capital added to the property.

There was also shown by the tables extended at pages 13 and 14 of the brief, that if we take not a single year, but a three-year comparative period, and instead of making the comparison with the five years preceding June 30, 1908, with the five years succeeding 1908; that if we, in fact, made a comparison of the three years preceding 1910 with the three-year period succeeding 1910, that in the last three years there was not, in fact, enough gain to pay even the 4 per cent that Mr. Lauck speaks of as being a fair return to capital. In other words, as shown on these tables extended on Mr. Lauck's own formula, that with the 43 Western railroads on which he shows the alleged gain of \$50,000,000, comparing one five-year period with another, that if we reduce it to the three-year period there was an actual loss of \$298,000, and if we take the ten representative railroads which Mr. Lauck extends in his exhibit, on which he shows such a large revenue gain, and apply this same formula for comparing the

last three-year period with the preceding period, it shows that on these roads there was over \$9,000,000 less than enough money to pay even 4 per cent on the additional capital, merely on the additional capital that went into the property during that time.

Now, in that situation it was suggested that we need waste no time in considering the question of whether Mr. Lauck's formula was right or wrong; that it would serve no useful purpose to go into a discussion of the manifest inherent inaccuracy of some of his assumptions, because the economic problem predicated upon increased revenue gains that might be of interest to some board in which that condition existed, was pure conjecture and pure hypothesis, and that in this case it was non-existent.

Then, as to the second point advanced, that there had been an increase in labor and responsibilities, we called attention to the fact, as shown on page 16 of this brief, that by taking the 19 Western railroads which were exclusively coal burners, it was demonstrated that in 1913 the firemen upon those roads were shoveling less coal per dollar of compensation than they were in 1909.

We show that the increase in pay per locomotive mile was greater than the increase in coal consumption per locomotive mile, carrying it out again to the very tables which Mr. Lauck submitted.

And, therefore, we concluded that, in view of the fact that engineers as well as firemen, during this period of time, have had an increase in wages accrue to them every time that they changed from a smaller to a heavier locomotive, that the increase shown by the schedules and shown by these figures measured up to, certainly up to, and, according to these tables, beyond, the increase in added labors or responsibilities. Therefore, as it seems to us, the employes have failed to establish the first two of the basic propositions upon which they predicate their claim. They have failed to show a change in productive efficiency, they have failed to show a change in labor or responsibility, except to the extent that such labor and such responsibility, when and as it has changed, has found awaiting it in the schedule, an added and higher rate which, according to these figures, was sufficient fully to measure up to, if not beyond, the added responsibility that comes from the use of added power.

That leads us to the third proposition that was announced as underlying the claim for an increase in wages, and that, as stated in the third point of Mr. Stone's opening statement was, "(3) Their earning capacity, even at the slightly increased rates of payment they have received, has declined."

Now, that proposition is discussed in the brief submitted on behalf of the employes, and in discussing this third proposition, I shall refer not merely to our brief and the way in which our claim is advanced upon that proposition, but also refer briefly to the part of the brief filed on behalf of the employes, which treats with that proposition. It begins at page 61 of the brief filed on behalf of the employes, under the heading, "Earning Possibilities Under Existing Rates and Rules." In the end, this proposition advanced on behalf of the employes rests, I think, upon this statement of fact: trains in freight service formerly were operated at comparatively high speed. The claim is made, and I think it underlies all this part of the brief on behalf of the employes, that notwithstanding the higher rate per mile which, admittedly, every engineer and fireman takes whenever he is transferred from a smaller to a heavier engine, that is assuming that the transfer is made beyond the breaking point agreed in the schedules as the point that separates the rates, the claim is made that, notwithstanding the higher rate per mile, that it takes longer to make the miles than it did prior to this adjustment of 1910, and that, therefore, even though the rate per mile be higher, that the retardation of the movement of the train has accomplished the practical result of keeping the men longer on the road to make the same number of miles. The argument would be sound, if true, but here it rests upon the mere assertion of the brief. Here it rests without any proof, while upon behalf of the railroad companies, we have introduced Exhibit No. 10, showing the comparison of the speed at the time of heaviest traffic. And I call your Honors' attention to the fact that in this very portion of the brief, at page 63, Mr. Carter says: "the month of October, 1913, the month in which the railroads' business was the greatest in the railroads' history," therefore, if at any time there would be a clogging and congestion of the means of traffic, if there ever was a time when the problems of the train despatcher as to when and where and how he could pass trains, as to the manner in which this congested

condition of affairs could be taken care of, whenever those problems were most oppressive and most difficult, will be the month of October, 1913. And yet what do we show? We show that even in this month of October, 1913, the month above all others that would make for a slowing up of traffic, for the keeping of men on the road, for difficulties in meeting and passing, and prolongation of hours, comparing that month with the corresponding month in 1910, the result is that in truth and in fact in every class of service these men now are making their miles in a shorter length of time than they were in 1910, and making those miles not at the low rates of 1910, but at the higher rates of pay which the larger power takes. And I call your Honors' attention to this Exhibit No. 10, because the question is fairly met. This is a claim for a general increase. It is predicated upon general conditions. A recitation of what occurred upon a particular division of the Wabash in 1910, by comparison with what took place upon that particular division in 1913, is of no persuasive value in a general movement, nor is it of any particular value as to what conditions are on some other division of the same railroad; because if, in fact, upon a particular division of a particular railroad the movement of traffic has been slowed up, should that be any reason for an increase in pay upon some other railroad where the movement of traffic has in fact been expedited?

Therefore, the only way in which we can measure and consider this question and its application to the problem which confronts the Board is to compare conditions in the territory as a whole, compare them upon all these railroads as if the companies were one operating system.

And take this month of congestion, take this month when, if at any time, the men would be delayed upon the road, and compare it with the corresponding month, a correspondingly busy month, if you please, but at any rate the same month of the year in which these adjustments were made, and what is shown?

By Exhibit No. 10, which showed all the trains on all of the railroads, separately as to each one of them, so that if your Honors desire to ascertain what was the situation on any particular road, by the detail sheets of Exhibit No. 10, you can ascertain just what was the speed, and just what was the time

taken to accomplish the run on each particular one of the railroads, a summary of the results on all the railroads shows that on the basis of the number of trains operated in October, 1910, 76.26 per cent accomplished their run at a speed greater than 10 miles per hour, while in October, 1913, this percentage had increased to 77.09 per cent. Or, if you do not want to count the number of trains, reduce it to the basis of train mileage; and on the basis of train mileage, in October, 1910, 76.40 per cent accomplished their runs at a speed greater than ten miles an hour, while in October, 1913, this percentage had increased to 77.76 per cent.

Now this Exhibit separates it into the classes of service, and sheet No. 2 of that exhibit pertains to the through freight service, in which principally the heavier power has been installed.

Comparing the through freight service, the average time for through freight trains in October, 1910, was 9.40 hours and the average miles made 113.2, while in October, 1913, the average time for all through freight trains was 9.31 hours and the average mileage 112; and in this class of service, on the basis of the number of trains operated, in 1910, 75.46 per cent accomplished their runs at a speed greater than ten miles per hour, while in 1913 this percentage had increased to 75.95 per cent. And on the basis of train mileage, in 1910, 77.24 per cent accomplished their runs at a greater speed than ten miles per hour, while in 1913 this percentage had increased to 78.30 per cent.

Therefore, if your Honors please, we submit that the mere statement that trains in freight service formerly were operated at comparatively high speed and in the later days this is not done, is not borne out by the facts in the case. As I said, the recital of what has occurred upon a particular division of a particular railroad can have no persuasive value in ascertaining and determining whether or not the particular situation on that division justifies an increase of rates on that entire railroad, or more markedly upon all the railroads in this entire Western territory. And when the acid test of fact is applied to this general statement, it is here developed, and developed conclusively, that not only are the men receiving higher rates of pay, but they are making those rates in a less number of hours upon these roads than they did at the time the last increase was granted.

This then brings us to the fourth and last proposition that

is advanced as justifying or underlying the request for a general increase in pay, and that is an alleged increase in the cost of living.

Now, first in that connection, it seems to me the cost of living in the situation here presented is one that this Board must find difficult to relate to any of the specific requests, which contemplate not merely an increase in the pay of the man at the date of his apprenticeship, but also an increase in the pay of the man drawing \$3,725 a year, who has attained the top of the ladder of his seniority. The relationship of the cost of living to a wage scale which provides compensation from the first day of his apprenticeship up to the day of this final attainment of advancement in his profession is, it seem to me, a problem that really has no relevancy to this situation.

As was said by Mr. Stone in the Eastern Arbitration of Engineers:

“We do not base these claims for increased compensation wholly upon the increased cost of living, as so many do, for two reasons: One is that the cost of living is largely a question of the standard of living, and, beyond a question of mere existence, is something each individual must decide for himself. The other reason is, there are so many elements that enter into the fixing of the rate of the wage for an engineer that must, in all fairness, be given far more consideration.”

And so, as I say, I cannot quite follow the suggestion that the cost of food has any particularly persuasive value, or any value whatever, in considering a request which will apply with equal force to these \$3,000 engineers and \$2,000 firemen, or the \$1,200 or \$1,500 firemen, so many of whom are shown in these exhibits.

But, as stated in Mr. Carter's brief, or the brief upon behalf of the employes—and I speak of it as Mr. Carter's brief merely because of his oral argument in connection with it—the proposition is advanced, with which we thoroughly agree, point 2, page 65, “The purchasing power of a day's wage is of far greater economic importance to the worker in any industry than is the rate of wage.”

Consideration of the question of an increased cost of living, of course, is entirely separate and distinct and apart from any question of changed responsibilities or changed duties. It re-

lates solely to the questions of earnings; have earnings increased commensurately with increased cost of living? Not raise of pay. The fundamental underlying argument of increased cost of living, as it pertains to wages, is, of course, that the earnings have not kept pace with the increases in the prices of commodities that earnings buy. Therefore, if it be a fact that since 1910 the earnings of engineers and firemen, the earnings as distinguished from rates of pay, have increased commensurately with the cost of living, then any persuasiveness in the argument of the cost of living must disappear. And my argument has been that by the adjustment of 1910 there was agreed upon not merely increases up to that date, but there was foreseen by the people who negotiated those scales, and by the people who rendered the award, the fact that there would be progressive changes in the duties and work of engineers and firemen, and that when and as heavier power was installed, so progressively would increase the earnings of the men who operated those engines, and that, therefore, under this adjustment of 1910, there was provided, and there has been of application from year to year, progressive increase in the earnings of the men who operate those engines.

In other words, referring again to the engineer who goes out today on an engine at \$4.95, and comes back on an engine at a \$5.45 rate, or the fireman who up to a few months ago was operating at a \$3.10 rate, and now in the last few months is receiving \$3.75 because of a change in the engines. Under the scale of wages agreed upon there was provided this increase in earnings when and as the heavier power came in.

The Chairman: Mr. Sheean, it is contended by Messrs. Carter and Stone, that engineers who earn as much as \$3,000 per year are enabled to do so by working an unusual number of hours, and that, therefore, they do not in reality represent the average high-paid man on the road under normal conditions. Now, what is your viewpoint on that? Is it your contention that it is possible, under the present schedules, for an engineer working the amount of time that a man should work, to earn the amounts alleged or showed to be earned by these tables?

Mr. Sheean: Yes, your Honor. Yes. It is our position that, under the present scale of wages, and these scales, of course, are of application from the time of the apprenticeship

up to the time that he gets the lighter and shorter run, we say that progressively, from the time that he enters the service, under these scales as they now exist, the man for a time in certain service is on the hourly basis of pay in certain classes because the hourly basis is the minimum guaranty, and only the minimum guaranty. And our claim and contention, if I may refer right now to that subject, is shown in Exhibit 29, and I will ask Mr. Keefe to get that exhibit for me.

The Chairman: I thought this was a very good time to clear up something that was in my mind in regard to this matter.

Mr. Sheean: Yes, I would be very glad, indeed, of the opportunity of clearing it up.

Now, if your Honor please, in connection with the payrolls of the company which show every man who worked for any length of time in connection with engine duty as engineer or fireman during the month of October, the following is the showing, and we count for this purpose a man who made a single run as a passenger engineer on this part that I am now calling attention to. Even though he made only a single trip, we count that as his full wage:

Of the 6,047 men, the average hours per day were 7.1; this is in passenger service; and the average pay drawn by those men was \$172.47. That is the upper round, that is the opportunity that is open to attainment under these schedules. Your Honors here are not asked to make an award that will not affect these men. The operation of the rules of seniority fixes and determines the rights, opportunities and privileges of the men.

Now, in that same month, if you count all of the extra men in passenger service and exclude only the men who laid off of their own accord to such an extent that their work made their earnings less than \$100, of the 5,646 men thus counted, the average earnings were \$180.39.

Now, through each class of service, and coming down into the total service in the yard class, about which—

The Chairman: Is that average made up entirely by men who only worked the ordinary amount of time in any one day?

Mr. Sheean: That average of passenger engineers is made up by taking the total hours of the men in passenger service, and the average length of time that they put in was 7.1 hours.

The Chairman: I understood Mr. Carter to insist that

these that we might term abnormal wages, say \$3,000, were only earned by working an unusual number of hours, and that is the point I wanted to clear up.

Mr. Sheean: The \$3,000 men—

Mr. Burgess: Were those engineers you refer to there making an average of 7.1 hours a day, paid by the hours or by the miles?

Mr. Sheean: Paid by the miles, presumably.

Mr. Burgess: What was the average miles per day?

Mr. Sheean: 166 miles.

Mr. Burgess: Is it not a fact, Mr. Sheean, not presumably, but is it not a fact that they were paid by the mile in that service?

Mr. Sheean: Presumably. I would have to say that, because in this total compensation, some of them may have drawn overtime, I cannot say. They were paid under their schedules, which give them first their miles, if they run them, and secondly, it guarantees them pay for every mile they run, and in case their miles are not up to their minimum day, then they are guaranteed an hourly rate, and these were paid under the present schedule, which it is proposed to change.

Mr. Burgess: That is true, Mr. Sheean, but what did you say the mileage was there.

Mr. Sheean: 166 miles, average.

Mr. Burgess: And what did you say the hours were?

Mr. Sheean: 7.1 hours.

Mr. Burgess: Now, Mr. Sheean, in order to get any additional payment there for the time on the road, he would have to be more time than would be obtained by dividing 166 by 20, is not that right?

Mr. Sheean: Yes, if this—I meant, Mr. Burgess, merely that there might be in this some cases of overtime. Treating it on the average, the average time, of course, the great majority of it was on miles, but whether all was absolutely, I cannot say.

Mr. Burgess: But if it shows that he ran an average of 166 miles in 7.1 hours, and the highest speed basis being twenty miles per hour, that would indicate, on the road, that he was absolutely paid on the mile basis.

Mr. Sheean: Treating it as the average, oh, yes, unquestionably.

Mr. Burgess: That is all:

Mr. Sheean: Yes, there is no doubt of that, on the average.

Now, on this Exhibit 41, if your Honors please, in which there are shown 131 men who, during the year, drew over \$2,400 in passenger service, their earnings are shown throughout the entire year. \$3,725.20 is the high man, and another drew \$3,178.50. Now, we can get the details of any of those. Those are all passenger runs, and I doubt whether in any case the hours on duty of these men having these high earnings, got up to as much as ten hours per day.

Mr. Burgess: But how many miles, Mr. Sheean, did that man make per month, that made the \$3,000 per year, or the \$3,700 per year, I think you stated.

Mr. Sheean: J. Shuttleworth, page No. 6 of this exhibit. In the month of July he ran 5,518 miles.

Mr. Burgess: For which he received how much?

Mr. Sheean: \$340.40.

Mr. Burgess: So that, to get that \$340.40, he ran 5,000 passenger miles?

Mr. Sheean: Yes. The next month he ran 5,378 miles, and drew \$334.75. And it gives the hours. He made during the year a total of 61,773 miles; he was on duty 4,095 hours through the year, and laid off 17 days during the year.

Mr. Burgess: Pardon me, Mr. Sheean, but he was being paid that entire year on the mileage basis.

Mr. Sheean: Undoubtedly, under their schedule. Well, I could not say undoubtedly, either. It is possible he might have drawn overtime on some particular trip.

Mr. Burgess: Yes.

Mr. Sheean: But he was on duty 4,095 hours, and laid off 17 days. 4,095 hours in that total number of days. Mr. Temple, how does that train run, on this Canadian Northern run? I see Mr. English is not here.

Mr. Temple: He is not here.

Mr. Sheean: Do you happen to know how this run between Saskatoon and Prince Albert is made?

Mr. Temple: It is a round trip daily.

Mr. Sheean: Do you know about the leaving time in the morning and when he gets back?

Mr. Temple: I could not say.

Mr. Burgess: How does he make a day, Mr. Sheean?

Mr. Sheean: 89 miles and return, and is paid for 100 miles each way, under their schedule. 89 miles each way, and he draws 100 miles for each leg of the run.

The Chairman: Let us assume an engineer is employed on one of these first class runs and he makes the run in the time fixed by the schedule; about what would be the average pay of an engineer working under those conditions, with no overtime?

Mr. Sheean: In passenger service?

The Chairman: Yes.

Mr. Sheean: I think we can show that without the slightest difficulty, because those do not change, and the earnings in passenger service were collected and shown in our Exhibit 30. On those runs, the passenger engineers in assigned service, it shows that the average pay per man is \$197.79, in passenger service. We have carried out and shown on this Exhibit 1—they talk about how difficult it is to keep up to the making of the miles—we show on that the total miles run and the total wages drawn, and of the total mileage made by those outside of the assignment, and what I mean by those outside the assignment is this, a man takes a lay-off of a day or two days, and it is filled by an extra man not on the assignment—

The Chairman: Is that average made up of men who worked the number of hours and ran the number of miles as contemplated by the schedule, and who drew no overtime?

Mr. Sheean: Absolutely.

The Chairman: Now, as to the freight service, what would it be?

Mr. Park: Before you leave that, how many in that service?

Mr. Sheean: The number of men regularly assigned was 5,412 in that service.

Mr. Park: Drawing \$197.00 a month?

Mr. Sheean: \$197.79 a month in passenger service, and of that, there was less than 10 per cent of their time filled in by the extra men. It is shown in the last column, how many miles were actually made by those out of the assignment.

Mr. Park: What was the average hours they actually worked per day?

Mr. Sheean: Well, the actual hours on duty through the

month was 184 hours, through the month of thirty-one days. They took the total hours on duty of all these men.

Mr. Park: That is about six hours a day?

Mr. Sheean: Yes, 184 hours.

Mr. Park: Does it show the percentage of men working the full month?

Mr. Sheean: Yes. Well, by mileage, Mr. Park. We did not count men, but we took the total miles made of men in the assignment.

Now, the total engine mileage for the month in passenger service was 22,849,000 miles. Now, all of that was made by regularly assigned men, except 2,409,000 miles by men who took an occasional run for themselves. Of the total of twenty-two million, of the total engine mileage in assigned passenger service, all but two million was made by the regularly assigned men. Five thousand four hundred and twelve men assigned to that service, and their average hours on duty for the month, of 31 days, was 184 hours through the month, and their compensation was \$197.79.

The assigned local or way freight is made up in the same way, and the average pay per man was \$195.39 for the engineers. That gives a total of 2,504 men regularly in that assignment.

Mixed train engineers averaged \$183.70.

The helper and pusher service. And there, by the way, is something that I want to call particular attention to. I will come to that a little later on. In the assigned pusher and helper service, 596 men in this territory are assigned regularly, or were in that month assigned regularly to the helper and pusher service, and those men averaged \$207.78 for the pusher and helper service.

Mr. Burgess: How many hours per day, Mr. Sheean?

Mr. Sheean: Average hours on duty, 323 hours. Slightly over 10 hours per day.

Mr. Parks: That is the spread of their work. It does not indicate that they were on duty all that time, or at work all that time?

Mr. Sheean: No.

Mr. Burgess: That sum total, then, represents every day

in the year, does it, Mr. Sheean? Thirty-one days in the month, I think I understood you to say?

Mr. Sheean: Yes, the month of October. Take the total hours of the men regularly assigned, the total hours of duty of the men.

Mr. Burgess: Assuming that the men worked 365 days a year.

Mr. Sheean: This is for the month. That shows it road by road. In this helpers' service it runs down as low as \$148.75 on the Chicago & Alton. Here is one of \$139 on the Kansas City Southern. But up as high as \$231.97 on the Chicago, Milwaukee & St. Paul that same month.

Mr. Burgess: Won't you, Mr. Sheean, give us some idea of the great difference there between the \$139 and the \$200 and something? Is it on account of the longer hours or the higher rate of pay?

Mr. Sheean: The entire schedule must be taken into consideration. Of course some of these assigned pushers and helpers are on the possibility of automatic release, and getting paid for two or three days in one. The whole schedule must be taken into consideration. You have got to see the entire schedule of that particular railroad to ascertain and determine why there should be and why there is greater amount of money produced to men in one situation than there is to men in the other.

Mr. Burgess: Well, was there any automatic release in existence with those high paid examples that you have shown here?

Mr. Sheean: I understood from Mr. Cochran here that the helper service up there fell under this rule of being released and the new day beginning.

Mr. Burgess: On that particular road?

Mr. Sheean: Yes. That is the one I had in mind when I spoke of the possibility of why you could not make comparison. The Great Northern Railroad got up to \$235.74, you see, as against \$139 on some other roads. What effect any such rule as that may have in money nobody can tell, Mr. Burgess, without seeing the whole schedule.

Mr. Burgess: Is it not a fact that that \$235 a month engineer worked more hours than the \$139?

Mr. Sheean: Well, he worked 330 hours, or was compen-

sated for that. 330 hours. This man on the Chicago & Alton had 375 hours, and made \$148.75.

Mr. Burgess: So that in this instance the engineer on the Chicago & Alton worked a great many more hours but got a great deal less money.

Mr. Sheean: Yes, or was compensated for hours. Now, in the compensated hours, of course, as I say, the particular schedule will have to be resorted to in each particular case to ascertain and determine whether or not they carry out in compensated hours 40, 50 or more hours in a ten hour spread, for the purposes of compensation.

Mr. Burgess: Well, I don't like to trouble you, Mr. Sheean, but—

Mr. Sheean: Well, no, I invite it, gentlemen, because I will feel that the whole purpose of my talk here will be nullified unless there be a question at any time a question arises.

Mr. Burgess: Well, it would be fair to assume, would it not, Mr. Sheean, with the engineer on the Chicago & Alton that worked 375 hours and only received \$148, that the automatic release did not apply on that railroad at least?

Mr. Sheean: I beg your pardon?

Mr. Burgess: With the difference between those men on different roads, one on the Great Northern working 330 hours and receiving \$235, and one working on the Chicago & Alton 375 hours and only receiving \$148, it would be fair to assume that the automatic release did not apply on the Chicago & Alton.

Mr. Sheean: I would say so, yes. Now, there are four men on the Chicago & Alton, four assigned pushers. I don't know whether that is the pusher service, I haven't any idea, but there are four assigned pushers, assigned to that. The Chicago & Alton may have a man who is assigned to push trains out of some particular coal mine who is home every night, and comes out and pushes three or four trains a day, and under their schedule they may possibly have this \$148.75 as a fixed monthly wage, which is determined, to meet the conditions, for the peculiarities of the work that is done on that particular road. Upon the Great Northern, we have mountain territory. The work is arranged, the compensation is arranged to fit into and adjust itself to what the peculiarities of the service may be.

I have, of course, no knowledge as to just where the Chicago & Alton maintains pusher service, but the Chicago & Alton is supposedly in prairie country, and where the particular assigned pusher and helper may be, and whether or not the work or duty performed by the man on the Alton is reasonably comparable with the duty of somebody else on some other pusher district, of course, could only be determined by finding out just what he did. I would like to make inquiries as to where the pushers are on the Alton, and what the men do.

Mr. Burgess: But here is the thought in my mind, Mr. Sheean, as one arbitrator. We have developed the fact that the engineer on the Chicago & Alton worked 45 hours more in the month than the engineer on the Great Northern. Is that right?

Mr. Sheean: Compensated more, yes.

Mr. Burgess: He would receive \$148.00, while the engineer on the Great Northern received \$235.00 for 45 hours' less work. Now, is that right?

Mr. Sheean: Yes.

Mr. Burgess: All right. Now, if the Great northern rate is full, fair and adequate, which I understand is your statement in the beginning, then it is reasonable to assume that the Chicago & Alton rate is not full, fair and adequate.

Mr. Sheean: Oh, no, not at all. It may be that upon the Alton, drawing \$148.75, that man was on a little light pusher engine, where they had a hump to get out of the yard, and it may be that on the Great Northern this \$235.00 is paid on a Mallet engine. I cannot tell without getting all the facts. Both may be full, fair and adequate.

Mr. Burgess: But if it develops that they were substantially the same engine—

Mr. Sheean: If they were substantially the same engine, one man's compensation might be more than full, fair and adequate. It does not necessarily follow, either one or the other. All that I could say from the deduction would be that one man was being paid more money than the other, and without knowing the conditions I could not tell whether the one was being paid more or less than he ought to be paid.

Mr. Burgess: But assuming that your statement in the beginning was the correct one, and that the compensation of

the man on the Great Northern was full, fair and adequate, then, of course, we would have to assume that the other was not.

Mr. Sheean: Not necessarily, no. You will note on this same exhibit, Mr. Burgess, the highest amount paid any one man in pusher service on the Alton that month was \$155.97, paid to Mr. J. W. Rieman, while the highest rate paid to any one man in pusher service on the Great Northern was \$329.65.

Mr. Burgess: Have you got the number of hours there?

Mr. Sheean: Not as to the \$329 paid to Alex D. Pauline. I think the hours are not shown on this. We can get them probably on the other exhibit.

Mr. Burgess: Never mind.

Mr. Sheean: So whether or not that \$329.00 man was being more or less compensated than the \$155.00 man, we would have to know the circumstances under which the work was performed, including the kind and class of motive power, as well as the other considerations that form a part of the wage scale.

Mr. Nagel: In assembling these figures, you have included only the regularly assigned engineer?

Mr. Sheean: That is all on Exhibit 30, but Exhibit 29 shows every man on the payroll, even the 99-cent man, and on our first page of that exhibit we have averaged that 99-cent man and given him the same value as an individual as the 31-day a month man, and we have carried that 99 cents as the man's earnings for the entire 30 days.

Mr. Nagel: So here we can find the fate of the extra men.

Mr. Sheean: Yes, precisely. On sheet No. 2 we have included the extra men, and then in the detail of Exhibit 2 you can also find just what the extra men separately earned.

Mr. Nagel: What they separately earned?

Mr. Sheean: What they separately earned, treating them as a class.

Mr. Nagel: Of course, the extra man is essential to the service, is he not?

Mr. Sheean: Unquestionably.

Mr. Nagel: And when he goes out he gets the same rate that the regularly assigned engineer would get?

Mr. Sheean: Unquestionably.

Mr. Nagel: But his employment is uncertain?

Mr. Sheean: Unquestionably.

Mr. Nagel: And the length of his apprenticeship is uncertain, too?

Mr. Sheean: Apprenticeship?

Mr. Nagel: I mean to say that the time he is kept on the extra list is uncertain.

Mr. Sheean: As to the extra fireman, yes.

Mr. Nagel: And therefore his pay is altogether more uncertain, and his existence more precarious than that of any of the men of whom you have spoken?

Mr. Sheean: Not the extra engineer, I think, because, as is shown here, the exercise of the seniority right is a progressive step in advancement, from the day a man becomes a fireman until he gets the final choice of run in passenger service. That is, it was contended here at the outset apparently that there was a breaking point after the man had gotten through his position as fireman and had become an extra engineer, where he had to go through another period of uncertainty; but the statistics which we have introduced here, the payroll figures which we have introduced here, show that the man as engineer on the extra list continues to earn as a fireman, catching an occasional run as engineer; and his earnings as engineer on the extra board, supplemented by his earnings as a fireman, do not make his condition one of great precariousness. I grant you, of course, that the regularity and absolute certainty that attends the man having a regularly assigned run, cannot obtain with reference to the extra engineer who is called for the purpose of protecting the extra board.

Mr. Nagel: I am very much interested in that phase. You say that the extra engineer really runs very little risk of being out of employment.

Mr. Sheean: Oh, none at all.

Mr. Nagel: In one capacity or another he will be employed?

Mr. Sheean: Here is the situation, your Honor. The moment that his earnings on the extra board are not sufficient to satisfy him—and the men determine the size of that board, \$100 a month, or whatever it is on the extra board—the extra board is cut. And as Mr. Carter well said, the final result is that the two youngest firemen would be demoted. But the men occupying the position of extra engineer have a voice in determining

the size of the extra board, and the men who are not satisfied cut the board down to where their earnings will furnish an amount of wage to each man on the extra board which enables them to get what they think are proper earnings there.

Mr. Nagel: And through that adjustment you say that the man on the extra list was practically supported in one employment or the other?

Mr. Sheean: Oh, yes. As I understand the practice upon the different roads, and as I understood all the witnesses to testify, whenever the earnings of the engineers on the extra board fall below an amount which the men on that board think is the proper amount, they make their request, and the board is cut accordingly.

Mr. Nagel: But the fireman on the extra list does not enjoy such a protection?

Mr. Sheean: No, the practical effect of the fluctuations of business I think has been fairly stated here to be that the youngest firemen, in case of a reduction of crews and the cutting of the extra board of the engineers, would be the ones who would suffer. The engineer taken off the extra board exercises his right of seniority to become the oldest fireman, and in the end, the last one of the row of books on the shelf is toppled over, or rather, the last two. Now, the extra fireman, of course, is the one who will suffer in such a situation.

The extra fireman is viewed by the railroad man as an applicant for employment. He is seeking employment. A man seeking employment with a railroad company makes application therefor and is put upon the extra list, looking for work, to get it when and as it comes to him.

Mr. Nagel: Is he not more than that? Is he not looked to and counted upon, and depended upon for services when a place is to be filled?

Mr. Sheean: A certain number would be, your Honor. In order adequately to man the service there would be, of course, a certain number, both of engineers and firemen, beyond the mere number necessary to man particular runs. There is sickness, there is unforeseen contingency, and there must be a reasonable number, of course, both of the extra board of engineers and the extra board of firemen.

Mr. Nagel: A certain number of men subject to call?

Mr. Sheean: Yes. While a man is on the extra list as fireman, he is seeking permanent employment. During that particular period of time his earnings and his opportunity to earn are very limited.

Mr. Nagel: And you do not think he is advanced beyond the place where he is seeking employment after the road is really depending on him and looking to him to respond to call.

Mr. Sheean: After he has passed that place, I would say yes.

Mr. Nagel: The question in my mind is whether a man who has advanced that far is entitled to receive more than the actual pay per mile or per hour when he serves.

Mr. Sheean: I want to say, your Honor, that that question is one which has interested me from the outset in the studying of this proposition, and is one that at some time unquestionably must be met. It cannot be met by a wage scale which by its uniform application gets up to the eventual earning of the two or three thousand dollars a year. In other words, there is not presented by this application a remedy for that situation. An increase in the rates of pay that will add to the earnings of the \$3,500.00 man, for the possible contingent benefit that it may be to the man at the bottom round of the ladder, is not the remedy to meet any inequity that may arise from railroad practice. In other words, there has grown up here through all these years the principle of seniority, the principle whereby the youngest man in service is the victim of the situation here described. It is not proposed to remedy that by any proceeding here. Unlike what is done in the shop crafts about which we have heard—where there is a reduction first in the number of hours for all men, so that when business is slack the shop goes on, and instead of running nine hours it goes down to eight hours, and five days a week, before anyone is cut—unlike the situation there, the principle of seniority has grown up here and has developed, and at the present time, so far as anything embodied in this request is concerned, it is not sought to be modified; and whatever wrong or injustice there may be, whatever special treatment ought in given circumstances to come to the man known as the extra man, certainly cannot be accomplished by a change in a wage scale applicable throughout the entire period of the service, from the beginning to the end.

Mr. Nagel: I was much impressed with the statement that the men were really more interested in conditions than they were in the wage scale; and this is one of the conditions to which my particular attention has been called throughout the hearing. That is, I have been more specially interested in the men who seemed to be the particular victims of the uncertainty of the employment. And yet I have seen no way under these demands to remedy that situation.

Mr. Sheean: Frankly, your Honor, approaching this problem as I did a year or more ago, the thing that impressed me was the same inquiry that is now made, as to whether or not there might be, as the combined result of the peculiarities of the business, together with the application of the principle of seniority, a situation that operated with undue severity upon those who were youngest in the service. But the men say the principle of seniority is a valuable principle, and I am not inclined to debate that question at all; and so long as that situation continues, whereby there is the insistence that the men of a certain age and standard of experience in the business shall have the right to the earning, shall appropriate it to themselves, and the youngest men shall bear the entire burden, I cannot see where the remedy could be brought about by a change in a wage scale. In other words, it is a situation that would have to be dealt with by a different form of request, and a suggestion, possibly, that might involve some modification of these seniority principles that are so highly prized by the men. In other words, your Honor, that is exactly in line with your Honor's suggestion. I have been credibly advised that within the last few weeks there is here under consideration, or at least under presentation by the organizations upon certain of these lines, to the management of those lines, a suggestion that the wages of some of these passenger engineers must be reduced. How? Not by a reduction in the wage scale, or, of course, not by any complaint that these passenger men are being overworked; not that their hours on duty are too long, but simply and solely that they are earning too much money. Here is an assignment now manned by three men. They say "Put four men on. There is money enough in that assignment for four men instead of three." Therefore, any hardship that may arise to the younger man in this line of work is not to be improved by a change in a scale

which already produces earnings to particular men beyond what is reasonably commensurate with their work and responsibilities, but must be approached, I think, by some other avenue than the one that is open to us here.

Now, I had made the suggestion on the increased cost of living, that we were not apart from Mr. Carter's proposition, that increased cost of living directed itself eventually, and in the last analysis, to the question of earnings. It is not how much work does a man do, or what are his responsibilities. The question is, how much money does the pay car bring, and has what the pay car brought him in the last period of time been such an amount that he cannot buy with it the same amount of necessities that he could buy with what the pay car brought him in previous years?

Therefore, if the practical effect of the constant substitution of engines that take a higher rate has been an increase of earnings of men progressive through the period, and if that progressive increase has kept pace with the increase of the cost of living, it seems to me that any argument predicated thereon has been fully met. And it seems to me, further, that if we are to treat, on the one side, the average conditions of cost of living, then we must, upon the other side, in its application to a general situation, consider the average increase in compensation, if there has been any during this period of time.

Now, we called attention to the fact, through Mr. Vance's testimony, and that has not been disputed here, that from an examination of the testimony offered in the Firemen's case in 1910, giving the record page, Mr. Vance found that the figures which were testified to by the Firemen in the 1910 case as to the cost of articles therein enumerated, in 1910, had undergone an increase between that time and the present of only 5.95 per cent. We also showed by Mr. Vance that, from an examination conducted by the Bureau of Railway Economics, he found substantially the same situation as was disclosed by the employees' exhibits upon the question of increased cost of living since 1909 to 1913. Of course, it was admitted by Mr. Carter that there had been a substantial change between 1909 and 1910; but, taking Employees' Exhibits 9 and 10, as Mr. Vance did, he shows that by applying this weighted index, which is made use of by the Bureau, and which is simply to ascertain the relative impor-

tance of these various items of food in making up the budget, that is, to try to ascertain the relative importance of flour as compared with sugar, but an advance in one—and I happened to pick out the two as to which there had been some decrease in that time—but to compare the relative importance in the increase in the price of meat, we will say, if there was some decline in the price of flour during the same period; now, by using this weighted index which the Bureau has made use of, we reach practically the same conclusion from the investigation conducted by the employes and also the figures of the Bureau of Labor itself. And that is shown to be that the average expenditures for food and rent increased about 9.3 per cent during this period of 1909-1913.

In this Exhibit 39 which was introduced by Mr. Vance, we showed that between 1910, the time of their last increase, and 1913, there was an increase in the earnings of engineers of 11.3 per cent and of firemen of 11.4 per cent.

There has been some comment made here as to the propriety of the method of making this comparison in the way that we did. Attention has been called to the fact that the Interstate Commerce Commission, among the reports which it requires of the various railroad companies, has endeavored to ascertain the average daily compensation of employes. It sends out a uniform form to all railroad companies with the following instructions:

“In the column ‘Number on June 30’ state the number of employes in each class, as determined from the pay rolls at the end of the year for which this report is made. It is not intended, however, that laborers engaged in the construction of new lines should be included among railway employes.

“Under ‘total number of days worked,’ give the aggregate number of days worked by all the employes of each class named during the year covered by this report.

“Under ‘Total yearly compensation’ give the aggregate compensation paid to all the employes in each class named during the year covered by the report.

“To obtain average daily compensation, divide the total yearly compensation of any class by the total number of days worked by that class.

“It should be specially noted that the number of employes

at the end of the year is not to be considered in determining the basis for computing average daily compensation."

Now, the Interstate Commerce Commission, in its statistics from year to year, continued down to this very last year, 1914, makes this statement concerning this average daily compensation of railway employes:

"The statements pertaining to average daily compensation are not altogether satisfactory. The compensation of employes on account of overtime work, for example, is not clearly reflected in these averages. The fact that overtime is sometimes paid for at a higher rate than the hours covered by the ordinary day, does not affect the average daily compensation here reported but the extent to which it affects the averages cannot be determined from the returns received. It is not possible to change the basis of ascertaining and reporting compensation for railway employes so as to arrive at the average amount earned each day by the average employes in each class, without either changing the rules according to which certain classes of railway employes are paid, or formulating a set of arbitrary rules for converting compensation into terms of a daily wage. Much study has been given to this question, thus far without arriving at any satisfactory solution. Meanwhile, the tables are continued, and if properly understood will serve a useful purpose as a basis of comparison from year to year."

Now, conceding that, with no definition or no instruction given as to total number of days worked, and conceding that the so-called day of an engineer and fireman is a misnomer, because there is not and never has been any such thing as a day—I will not say never has been, because at one time they were paid by the day, many years ago, but that is long before the time when their present scale was in vogue—it nevertheless remains true that a comparison from year to year and merely for the purpose of comparison, will afford some idea as to whether or not the compensation has increased from year to year. And, therefore, using these figures only for the purpose of comparison, comparing the same road from year to year, comparing the same number of roads from 1909 to 1913, we reach the conclusion which is corroborated by Mr. Lauck's detailed figures pertaining to the burning of coal, and that is, that when and as the larger power has come in not alone in 1910, but in 1911, when a

new engine was put upon a particular railroad and took a higher rate of pay than the one that it supplanted, the earnings of the man or of the men operating that heavier engine were greater, and therefore, through this three year period from 1910 to 1913, it is shown that the earnings of the firemen—Mr. Lauck declined to take the number of men, because the showing would be that per man it was greater, and therefore he treats it only as the earnings of the men as a class—but reducing it to the form which the Interstate Commerce Commission has prescribed, it is shown progressively through these years that the earnings of engineers have increased 11.3 per cent and the earnings of the firemen 11.4 per cent during this period of time.

Now, if that be the situation, then, as we contend, not merely an increase was granted in 1910, but a rule laid down in the Arbitration in the Firemen's case, agreed upon in the joint negotiations with the Engineers, whereby there have been progressive increases, an increase in pay every time that an engine of the larger power came in. And, as indicated in connection with the figures submitted by Mr. Lauck, upon the question of consumption of coal, the increase which thus came to the engineer and to the fireman when and as the larger power has been introduced, shows that down to the present time it has kept pace with any addition on any basis in the increased cost of living.

Mr. Nagel: But was not that increase intended to meet the additional responsibility and labor entailed by the employment of the larger engine and the heavy tonnage?

Mr. Sheean: There was submitted in that case all these figures as to increased cost of living, also the increased responsibility, yes. Now this is the point I was trying to make, Mr. Nagel—

Mr. Nagel: Is not the same 11 per cent meeting both conditions?

Mr. Sheean: Yes. Let me explain what my position upon that is. If I am right in my premise, that increased cost of living has relevancy only on the question of earnings, then it makes no difference for what reason a person got higher pay at a certain time in the period. That is, my understanding of the argument of increased cost of living is predicated purely on the fact that the money brought by the pay car, irrespective of what

the man does to get that money, but that the money which he gets will not buy as much of the things that earnings ordinarily go to as it would in previous years. Now, I take it, at least my argument is predicated fundamentally upon that proposition, that it makes no difference what was the reason for an increase granted in 1910. If there was an increase granted, which has remained progressive through the period, so as to meet the additional expense that may come through a reduced purchasing power of these earnings, that then the cost of living argument is met. Because, as I understand it, the cost of living argument ignores entirely the question of what a man does to get the money. It, in the end, is an argument predicated upon a living wage. Now, if I am wrong in the underlying assumption, then the argument falls, but so far as I know, no argument pertaining to the increased cost of living has relevancy on any other question except the one, have the earnings increased, whether through increased labor, through increased opportunity or through what cause, have those earnings kept the pace with additions to the cost of living in the meantime.

Mr. Nagel: Is it not difficult to divide into sections?

Mr. Sheean: I think so, yes.

Mr. Nagel: After all, the cost of living is an element. The right to make more than a mere living is an element.

Mr. Sheean: Unquestionably.

Mr. Nagel: The extraordinary work to make considerably more than a mere living is an element.

Mr. Sheean: Undoubtedly.

Mr. Nagel: And the question is whether any of these elements have crept into the case since 1910, accepting your argument.

Mr. Sheean: Precisely. And the reason I made this subdivision, your Honors, is in the effort to try to follow the chart which the opposition has laid down. Mr. Stone enumerated it as 1, 2 and 3, and I have taken those up in the order—although not in the order, because productive efficiency, increased labor and responsibility are separated there, whereas, as it seems to me, in this case, in the end, increased labor and responsibility is one and the same thing with so-called productive efficiency. But in the following of the argument as laid down, the fourth point having been stated by Mr. Carter, and also contained in

the printed brief, I have attempted to take up each of the reasons advanced and to meet them separately insofar as I thought that the evidence justified the assertion that each of these propositions had been met.

Now, that covers the four points as made generally, as justifying the increase, and I think perhaps before passing to the separate articles that I ought—

The Chairman: Will you please suspend a moment?

(At this point a short recess was taken.)

May it please your Honors, before taking up the separate articles of the Proposal, I think perhaps I should briefly refer to this first chapter of the printed brief on behalf of the employes, on the question of standardization. I shall be very brief, because, as it seems to me, this question of the possibility of making standard rules and rates of pay has been eliminated by the situation that now confronts the Board.

Again, adverting to Mr. Cadle's frank admission that in one schedule you may find one arbitrary, and in another, another arbitrary, and that all combine to make up the compensation of the men so that you cannot measure compensation on one road, or compare it with compensation upon another road without having all of the schedule provisions of that particular road before you at the time of the comparison. I want again to call attention to the fact that when the railroad companies endeavored to leave open to a board of arbitration the fixing of a schedule that would be a full, fair, proper schedule covering all of the compensation of engineers and firemen, so as to permit that board to make uniform, so far as conditions permitted, to standardize so far as it was feasible, that that suggestion of action was rendered impossible of fulfilment, and although it was accompanied by a proposition that the men would be given the opportunity on each road, the right on each road to elect after a complete schedule was awarded, either to adopt the schedule in its entirety or to continue under their present schedule, that such opportunity was not given to us, and is not open for consideration here.

In other words, the advantages or disadvantages of standardization or of uniformity is a purely academic question. When we were anxious to go along in the effort to standardize or make uniform, just so far as conditions are uniform upon

the different roads, so as to bring out of this, out of the result of any arbitration, a schedule that would work uniformly upon all of the roads, an award that would treat the roads in the same manner when applied, not with the desire or purpose or intent of reducing the wages on any road, but to give to the men on each road the right to elect whether they would take this uniform schedule, or to retain their present schedule, that offer was declined.

And so, as it seems to me, we are rather wasting time upon a discussion as to the possibilities of standardization that is suggested here in the first chapter.

Now, I grant you that in so far as conditions are uniform upon the Ft. Worth Belt on the one hand, and the Canadian Pacific System upon the other, there may be no particular reason why there should not be a standard schedule covering rules, conditions and rates of pay. There are certain things that remain uniform in railroad operation. There are certain duties and responsibilities that pertain to the entire situation. But we have here the request of the Ft. Worth Belt as one of the parties to the arbitration, a switching road, as a matter of fact, and another party to the arbitration the other system that I mentioned, the Canadian Pacific, or any other one that would serve for purposes of illustration just so well. And this Board is asked to lay down in certain respects, certain principles or certain rules, or certain regulations applicable in like manner to the Ft. Worth Belt and to the Canadian Pacific System. Now, just so far, and only so far as there is uniformity in the duties and responsibilities of the men in those two situations, can the Board properly go in making an award which must be applied with all the rigidity of a straight-edge to the schedules and to the operations of the different systems.

In passing, attention was called to the fact that this so-called uniformity in different lines of employment did not bring about uniform scales in the skilled classes throughout all this vast territory. In the printing trade that Mr. Carter called attention to, the different scales as between Peoria, Pekin, Bloomington; the differences that exist between the different parts of the territory have been recognized in practically all lines of employment.

But just what comparison between the duties and respon-

sibilities and work upon the Ft. Worth Belt switching line may be by a comparison or contrast with the work upon the Denver & Rio Grande, we are not advised. But I simply want to say in connection with this chapter of the brief presented on behalf of the employes, that of course any award that is made here under the form of Arbitration Agreement, must be an award that will simply measure and only measure the things that are uniform to all of the railroads, because it is to be uniformly applied to each and all of them when handed down.

Mr. Nagel: Are you going to suggest to us what conditions are uniform, or where the conditions are uniform between the different roads, or are we to ascertain that afterwards?

Mr. Sheean: I didn't hear you.

Mr. Nagel: Are you going to be of assistance to us by telling us where you will find uniform conditions?

Mr. Sheean: Yes. Every railroad in the movement has a locomotive engine. Now, then, there is uniformity in the fact that an engineer operates that locomotive. There are engines shown in the movement here as low in weight on drivers as 22,000 pounds. Therefore, this Board, of course, in making any award here, must make its award fixing the minimum that shall be paid for an engineer or for a fireman in any class of service, because only to the extent that that minimum persists is there uniformity through the field as a whole. In other words, a locomotive is always a locomotive. A railroad is always a railroad. The small railroad has the duties and responsibilities of an engineer and fireman, and those duties and responsibilities possibly increased by other conditions remain uniform throughout the entire system. But only to the extent, if your Honor please, as I view it, can there be an award here which contemplates the minimum performance in any of the classes of service in keeping with the surrounding circumstances there.

Now, I think that that must be the conclusion, that this request is and can be only a request for a fixing of a minimum wage in each of these classes of service, because in each of those classes of service there must be a certain extent of uniformity. The running of a locomotive under any circumstances may justify the payment of a minimum wage for it. And only to that extent can you say on the evidence, is there uniformity in the

performance and practice and duties and obligations upon the several situations which the evidence discloses.

Mr. Nagel: In other words, the conditions under which the engine is worked, or the road operates may vary very largely within this territory?

Mr. Sheean: Yes.

Mr. Nagel: And do you think it would be unsafe to standardize all the roads, even on the basis of the locomotive at the highest point throughout the territory?

Mr. Sheean: Well, yes, without any question, because that, of course, would mean that there would be no uniformity. You are standardizing then at a scale which is not a uniform scale upon all the railroads. In other words, the one thing, I think, that is uniform, and the only thing that would be uniform, would be the standardization; uniformity in duties that pertain to any kind of an engine, no matter where operated. There may be other added duties and added responsibilities and further productivity under further and different circumstances. But the one thing that remains uniform throughout, is the minimum performance on the road having the least duty and the least responsibility that there may attach to the duties of an engineer and fireman.

Mr. Nagel: You think, then, that if you have standardization we must accept as the basis of the minimum the lowest charges that are included?

Mr. Sheean: I should say so, your Honor, because I cannot see where there would be the uniformity running through the field in any other respect than that. And that the proposition as here made, that in addition to what is thus awarded on the basis of uniformity, that there shall be retained to each one anything that is other or better or higher than that, it would seem to me an unavoidable conclusion that that is the only thing that can be said to be uniform in the territory as a whole.

Now, attention is directed by the printed brief on behalf of the employes to the end of this first chapter on standardization, that the instructions which were sent out by the railroads contained the following statement:

"The proposed wages should in every case be figured upon the units of performance for October, 1913. It should not be

assumed that changes would have been made in the service in order to meet different supposed conditions."

Now, it is manifest that the sole purpose and object of these instructions was that we would have here a uniform base as to all of the railroad companies. It seemed to us that to a certainty in the presentation of our figures of comparison of what we would have the men earning during that particular month, that we ought not to have injected the collateral question which would be raised by some of our operating officials, saying, "Well, had this schedule been in effect I might have changed this run. Had this particular schedule been in effect I would have changed the time. I would have changed this, I would have changed that, and I would have changed the other thing." Therefore, in order that there might be absolute uniformity, what was done? The instructions were specific, that they should take simply the time slips which showed the actual performance of the men during a month of actual operation, and apply to that the proposition as here presented. The month was taken in which the demands were presented. We did not want to have injected into it the possibility that operations had been shaped in such a manner on any railroad as to reflect a particular result, or that they had in mind the effect of a particular proposal. The month in which they presented it, partially gone, partially completed at the time the demand was made, was taken, and the time slips of that month, operating under present schedules, taken, and comparisons made, because it seemed to us it would be an endless task. Probably our figures of comparison would be worthless if we permitted a particular railroad to say, "Oh, well, yes, while these men did run in this way, while this train ran on that schedule, yet if I had had this kind of a schedule I would have changed the time card here and had a different rating here," and therefore, in order that there should be an absolute uniformity, not the speculation of operating officials, or men connected with the road, as to what it would have done had it been in effect, not a conjecture, not a guess, but the actual payrolls, the actual time cards, the actual time slips of what they did, were taken, and then alongside of it what the earnings would have been.

And it is significant here that after the careful check of these five railroad companies, after taking these time slips,

after all of the data that they requested with reference to those systems, there has not been a single word of suggestion from the other side that our interpretations or our proposals or that our application as to any one of these requests was improper in any manner. They had before them the time slips, the train sheets, all of the data that they asked for. They had that for the purpose of comparing their proposition. They had the right to put upon the stand any witness familiar with this proposition to testify that the interpretations placed upon it by Mr. Trenholm were exaggerated.

Now, it won't do to talk about exaggerated estimates; it won't do to talk about these mere estimates swelled—mere estimates and duplications—when not a witness has testified in contradiction of a single one of those estimates, although the time slips were open to check and verification, although the interpretations placed upon them in each of these applications were also open to them. And not a witness at any time has taken the stand in rebuttal to say that a single interpretation placed upon these proposals, either by Mr. Trenholm or by the instructions which went to the road, was inaccurate in any particular.

And now, that brings me to a discussion of these various articles, and in the brief they are taken up, article by article. And first, let me say this, as to this Article 1: I have divided that, first, beginning at page 26 of the brief, into the request pertaining to passenger service, and there has been some talk here about a possible five-hour day. Some talk about the necessity of doing this, that and the other thing in passenger service. What passenger engineer, what passenger fireman has been upon the stand testifying that upon any road in this movement, on any train run, either his duties were arduous, either his pay was insufficient, or any facts stated that entitled him to any change on any railroad in the present existing schedule pertaining to passenger service? Why, they say "These figures are too high." Why, they say "We admit that it is possible that people operating under these schedules can earn this \$2,200, \$2,500, \$2,700, \$3,000, \$3,500, \$3,700 a year," running in passenger service under schedules as they stand, no five-hour day in any of them, no twenty miles an hour for computing overtime. This is what they earn now.

What then, is the basis of the change? What have they to say in support of this Article 1, pertaining to passenger service? Five hour day, twenty miles an hour? Why? "I can only earn \$3,700.00 a year under your ten hour day. That is all we get now in passenger service, \$2,500, \$3,000, \$3,700 a year. We are being abused. It is a ten hour day. We want it changed to a five. You are only paying us ten miles an hour for overtime, and all that that brings us is this \$2,500, \$3,000 or \$3,500 a year."

I want to submit in this connection that not a single syllable has been offered by any passenger engineer, any passenger fireman to show that on any railroad in this movement his earnings have not been full, fair and adequate.

Now, passenger service is covered, covered specifically by the schedules. I do not care what their basis of overtime in the East is. I do not care whether they speak of a five hour day or twenty miles an hour, or $12\frac{1}{2}$ miles an hour. This is what these men are getting in the passenger service, and not a single one of them has taken the stand to show any reason why any passenger schedule should be changed.

And then this talk about a day, five hours or less shall constitute a day, and this talk about overtime. Why, your Honors, when you get to understand the peculiarities of this schedule, there is no such thing as a day in passenger or freight, or any other service. There is no such thing as overtime. There never was. Merely for convenience of comparison, converting it into terms of comparison by people who work by the day; by means of comparison with people who work in other trades and crafts. The engineer and fireman is paid for every mile he runs. He is guaranteed that he receives pay for every mile he runs. He is paid a minimum compensation per hour. This converting of miles into hours and the speed basis of ascertaining overtime is simply another method of a certain guaranty. The twenty miles per hour speed basis is ascertaining simply and solely when they shall begin paying something more than the mileage basis that they are receiving.

Why attention was called to this fact here in the brief itself, called attention to by Mr. Robertson when he took the stand here: "Oh, well, ten miles an hour, twenty miles an hour, that does not make much difference. Nobody gets overtime in pas-

senger service anyhow." Why do they want it? What is the basis of their suggestion here? Why do they ask to have it here? Why don't they call some witness to show that passenger engineers and passenger firemen are not being paid sufficiently?

I want to call attention to page 27 of the brief, to the fact that there was no award in the East about the five hour day in passenger service. They say it is all the same.

The Chairman: What is the page, Mr. Sheean?

Mr. Sheean: Page 27 is the Award in the East, engineers in passenger service.

The Chairman: Do you find this particular point there on page 27?

Mr. Sheean: Yes. The Award there was for through passenger service.

There has been talk here about five hours or less being just the same thing as overtime on the basis of twenty miles an hour; but I remember that when I suggested, by way of colloquy here, that we could strike out this "five hours or less," if it meant nothing, if it would not modify the request, there was a suggestion to the effect that it was too late to throw life-lines, or something of that kind.

But the Engineers' award in the East makes no determination of the number of hours that shall constitute a day in passenger service.

Mr. Nagel: It does in the case of firemen, does it not?

Mr. Sheean: Yes, in the case of firemen; but in the Eastern Engineers' case there was no fixing of the hours in the passenger service. It does provide that all passenger overtime will be paid for at the rate of fifty cents per hour, and will be computed on the minute basis. They fixed a minimum rate of \$4.25, so that the overtime rate is a little less than one-eighth of the minimum daily rate.

Now in the Eastern Firemen's case they provided for five hours or less in through passenger service, overtime rate 30 cents an hour, and fixed the minimum daily rate in passenger service at \$2.50.

Compare and contrast, if you please, the request that these gentlemen are making here now as to the rate to be fixed in passenger service in the West, with the rate in the Eastern Award. Compare the 30 cents an hour which they fixed on a

20 mile an hour basis. It was named as a five hour day in the Eastern Firemen's case. "Five hours or less shall constitute the day, overtime 30 cents an hour."

Now, I wanted to call attention particularly to the fact in this connection that the Managers' Committee proposed, and made no controversy here about it, that the time of a fireman and engineer should begin when they are called upon to report for duty. I want to call your attention to the argument which Mr. Carter makes in connection with this Article 1 of the proposition submitted. At page 9 of his brief, as one reason justifying the alleged five hour day, he says:

"(3). Much of the time required of Engineers and Firemen in passenger service is in addition to the time included in this rule."

In other words, if there should be an award here that fixed the time of engineers and firemen at the time that they were required to report for duty, and they did in fact take the half-hour time which has been described as the time necessary to prepare the engine, and another half hour to get down to the depot, and then a three-hour run, or make it three hours and a half, and another half hour at the other end of the run to take the locomotive to the designated track, you would have your total of the five-hour day with three hours' running time between those terminals; five hours of 20 miles an hour, with overtime. To make 100 miles you would have to maintain a speed of 33 1/3 miles an hour running time, or else every one of those trains would be on overtime. Now, what comparison is there between the 66,000 miles of railroad in the East, arbitrated in the Eastern Case, with these 140,000 miles of railroad involved here, climbing these mountains, paying these rates for mountain service, and scattered over this wide territory? What basis or justification is there for asking that in this widespread territory there be a rule which in substance would require that every passenger train making a running time below 30 or 35 miles an hour should be on overtime from the time it starts, that is, assuming that the award gives here the starting time of engineers and firemen as the time that they are required to report for duty? Because, mind you, although they are under pay for it, this half hour that they are preparing the engine, you are

counting off your 20 miles an hour this actual time, as against the time at the roundhouse while they are preparing the engine.

Now we showed here, and their exhibit also showed, that in this Western territory there are hundreds of trains that even between terminals, after you have gotten the preparatory time, after the engineer is down at his depot and has started out, have not the speed of twenty miles an hour, although they make their schedule, and from the moment they leave the depot they are on the basis of overtime. What justification is there for adding to these rates of pay? Why, it is before your Honors here as to what these men are getting in this territory now. And yet they want it increased—increased under the guise of this rule.

In the Eastern case the award was for through passenger service. Subsequently the Board of Arbitration was requested to interpret among other things the following:

“What is through passenger service within the meaning of the award reading ‘Overtime in through passenger service is to be computed on the basis of twenty miles per hour?’”

They gave the following interpretation, which is set out at page 30 of our brief. The Board said:

“In regard to the interpretation of the award of the Board reading:

“‘Overtime in through passenger service is to be computed on the basis of twenty miles per hour,’ the Board find it necessary also to consider service other than through passenger service, and to the adjudication of this point the parties concerned agree. The following award is made:·

“On short turn-around runs no single trip of which exceeds 80 miles, including suburban service, overtime shall be paid for all time actually on duty or held for duty in excess of eight hours (computed on each run from the time required to report for duty to the end of that run) within twelve consecutive hours; and also for all time in excess of twelve consecutive hours computed continuously from the time first required to report to final release at end of last run. Time shall be counted as continuous service in all cases where the interval of release from duty at any point does not exceed one hour.

“All other passenger service overtime shall be paid for on the basis of twenty miles per hour computed from the time re-

quired to report for duty until released, and separately for each part of a round trip run."

In the Firemen's case this part of the award was also adopted, of the short turn-around runs, no single run of which exceeds 80 miles, being excepted from the computation of overtime on the basis of twenty miles per hour or the five hour day.

Now, we most respectfully call attention to the fact that turn-around service in territory as densely settled as is the East may justify properly a different situation as to the spread of hours in turn-around service from what is possible and proper in Western territory, a territory so vast, with the population so scattered, only one-third of the number of people per mile of line that there are in the East, with the little turn-around runs arranged to let the people from the outlying communities get into the county seat, spend the day there and get back home at night; with a run that may have a double spread if you please to more than twelve hours, but the duties and services of the engineer and fireman on such a run not arduous, not exacting—easy money, easily earned—as shown by the exhibits in this case. What turn-around run in this territory has been described by these employes which, under the present schedules, is not paying adequate compensation?

What justification is there to disturb the situation grown up in this service through all these years, to call for the application of this straight-edge, with no proof whatever that calls for any change in compensation or change in underlying rules?

Now, I grant you there might be a situation upon turn-around runs where some reasonable limit of time should be fixed, and determined absolutely by schedule provision. It is admitted that a turn-around rule must be provided differently from the bald, bold request of this article, if there should be any award at all. But we submit that if any turn-around rule is provided for territory as vast as in the West, a greater spread of hours should be permitted and provided in this Western territory than is provided in Eastern territory.

I want to call attention particularly to the fact that in this Western territory, the mountain train movement, as compared with valley territory, is generally recognized by the application of higher rates. There are no differentials either in the East or in the Southeast because of these physical characteristics, and

the application of a speed basis here in this Western territory for fixing overtime, or at least the fixing of the same basis of overtime as that fixed for a level country that has no mountain differential, would bring about a disparity in conditions absolutely without justification in the proof as we view it.

We have shown here—and I desire to call attention again to the fact that there has been no dispute as to this—our Exhibit No. 3 showing passenger operations in this Western territory for the month of October; and passenger operations, mind you, are assigned runs. They are fixed by the demands of the locality, possibly by orders of railroad commissions, possibly by right of way contracts; but in any event they are fixed to serve the demands of those communities. These trains go into county seats in the morning and give the shoppers the opportunity to spend the day and run back again in the evening. All those conditions are fixed and have grown up and developed with the growth and development of this great western country. Yet they ask you to change them by this rule. To have applied this rule to the operations during that month of October would have meant to the engineers and firemen on these runs \$75,298.85. It would have meant to these 5,000 engineers, and firemen, or to a small part of them if you please, in a single month, an addition of \$75,000 for their wages, or over \$800,000 a year.

To whom? To no one except these passenger men. Has any one disputed the correctness of the figures? In Exhibit No. 3, you have the details, road by road, of the amount that this passenger request would cost—\$800,000 a year, added to the compensation which the organization says is now so high that we have got to divide up some of these runs and put some more men on them in order to keep the average earnings down lower.

That is the situation as to passenger service.

Paragraphs 2 and 4 of Article 1 cover all other service except switching: "One hundred miles or less, ten hours or less, will constitute a day's work in all classes of service except passenger and switching service. All mileage in excess of 100 miles shall be paid for pro rata. Ten miles run will be the equivalent of one hour's service performed, or vice versa."

Now, our Exhibit No. 1 shows that practically all the mileage in Western territory at the present time has the provision

that 100 miles or less, ten hours or less, will constitute a day's work in all classes of service except passenger and switching service. But the same Exhibit No. 1, at pages 272 to 275, shows the numerous modifications and local agreements which permit of an enlargement of the use of engineers and firemen from the strict letter of the rule.

In other words, your Honors will recall that Mr. Higgins stated here that practically 98 or 99 per cent of all the actual operations of the railroads were fairly covered by this "one hundred miles or less, ten hours or less will constitute a day."

Now, pages 272 to 275 of this Exhibit No. 1 show how necessary it is to provide by specific schedule provisions for particular, peculiar little local situations that should be taken out of the operation of this hard and fast and inflexible rule. A series of short runs in or out of the terminal, or the combination of a deadhead trip with another trip, avoid the payment of two days in one, and the various exceptions and provisos in order to prevent the pyramiding and accumulation of payments in only one period of actual service, rendered in either time or miles.

What is the purpose then of this rule as proposed? Why, simply and solely to wipe out of existence all of these exceptions which have grown up through years of experience and of necessity upon the different roads, and to apply the straight-edge, one hundred miles or less or ten hours or less to any and every situation.

Of course here in Illinois, where we still preserve equity as separate from the law, or pretend to, we always have impressed upon us the old definition that equity was devised for the purpose of applying principles of right and justice and good conscience to peculiar situations, where the law, by reason of its universality, is deficient. And here we have the practical situation, of the law, "one hundred miles or less, ten hours or less shall constitute a day." Alongside of it in the same schedule, here on pages 272 and 275, are the equitable exceptions to this rule, which these men have agreed upon through all these years. I ask you to examine these pages, to see how fair and equitable and just and right are those exceptions built up in those particular situations and localities, and as to why there should be those exceptions. But here we have the proposal to wipe out all

equitable exceptions and stand on the hard and fast statement of the law, which by reason of its universality is deficient to meet the whole situation.

Now, that is all that this "ten hours or less, one hundred miles or less" request means. Our own exhibit shows the cases. Where is there a twelve-hour road? Where is there any other road here except a ten-hour road? What are they seeking to correct? Why, they are seeking to apply the straight-edge, to wipe out the equitable exception. That provision is already in all their schedules. There is not a road in the movement that does not have the "ten hours or less, one hundred miles or less shall constitute a day." The sole purpose of a reaffirmation or a reiteration in the form of an award is to wipe out the equitable exceptions, and we submit there is no evidence to justify that. Why, what proof has there been here, what suggestion has there been by way of evidence here of changing the standard day agreed upon in these different schedules? What road are they seeking to have brought under the operation of a ten-hour day that is not already under it? They are seeking absolutely, in the end, by the reiteration here in the form of an award, of this statement of "ten hours or less, one hundred miles or less," simply to wipe out the exceptions which you will find enumerated at pages 272 to 275 of this exhibit, and that can be the only purpose of that part of the proposal.

"All mileage in excess of one hundred miles shall be paid for pro rata."

That is found in all the schedules. But right in connection with it there is also found in practically all the schedules "time in excess of ten hours or mileage in excess of one hundred miles paid pro rata."

The mileage guaranty is still maintained; but they propose now on this language "ten-miles' run will be the equivalent of one hour's service performed, or vice versa" to substitute the unit of ten miles, the equivalent of one hour. Heretofore, the unit has been the 100 miles or the ten hours. There is nothing in the testimony here that justifies a change in language of schedules well understood, schedules which have been operated under, schedules which are interpreted to mean that you cannot combine time and miles in the same period, and to substitute for it a different rule, the unit of ten miles as the substitute for one hour and

vice versa, one hour in service, to charge it up as ten miles, or ten miles to charge it up as one hour, and combine them in the time if necessary. If it does not mean that, then why change the language of the schedules now?

But that brings us to a discussion of the alleged punitive payment for so-called overtime.

"Overtime in all other service except passenger and switching service will be computed on the basis of ten miles per hour and paid for at the rate of fifteen miles per hour for each class of engine used."

Now this time and a half proposition is somewhat like the suggestion this morning that there might be a rattling of financial skeletons, and has been used as a make-weight in negotiations in a great many wage movements in times past. It has been permitted to go to arbitration just twice, so far as I know. The request for time and a half has been passed upon by the State Board of Arbitration in Illinois and by the recent Board of Arbitration under the Newlands Act in the Trainmen's case.

In 1910 the switchmen of Chicago, in an arbitration proceeding with 13 of the railroads centering in Chicago, submitted for decision this proposition:

"Yardmen will be paid on the basis of time and one-half for overtime, any fraction of an hour to be paid for as one hour."

The Award on this request was as follows:

"Switchmen, or yardmen, as they are referred to by the Brotherhood, perform two distinct forms of service.

"The first is yard service, which, according to the testimony rendered and the observations made by the Board, is the more onerous and hazardous. The second is the transfer and industrial service, which involves considerably less hazard, and less physical exertion. From the information at the service of the Board, it is impossible to draw any sharp line of demarcation between these two classes of service because a crew may perform yard service for part of a day, and may be assigned to transfer service for the remainder of the day. All the men in the switching service are considered as belonging to the transportation service, and any rule concerning so vital a question as overtime, will therefore affect the entire service of which the switchmen are a part.

"In reaching its decision on this point, therefore, the Board

has had to give consideration not only to the result in this particular case, but also to the effect which its decision would have on the rest of the railway service.

“It is argued that a punitive overtime charge is the only effective means of limiting the hours of labor, and that such a charge is of practically universal application in all organized industries. Evidence was also presented, however, to the effect, that the custom in all transportation service is to pay for overtime on a pro rata and not on a punitive basis. So well established seems to be this principle, that in the controversy between the Railroads and the Switchmen’s Union, which is now being arbitrated under the Erdman Act, no claim for overtime has been made, nor has this question been raised, so far as the Board is aware, in any of the other pending controversies between the Railroads and their employes.

“Conditions in the transportation service differ from those in the shop, or in the building trades, in that overtime cannot be readily and completely controlled. Weather conditions, density of traffic, unexpected breakdowns at points lacking facilities for prompt repairs may, either singly or together, cause delays to such an extent that a run which, under reasonably favorable conditions takes ten hours, may be protracted to fourteen hours.

“In such cases the crew is not called upon to perform 40 per cent more labor, as would be the case in a shop, but is required to spend 40 per cent more time in performing the same amount of labor. To that extent, therefore, the Railroad Company is already penalized for the delay, and it does not seem proper to the Board that, in the transportation service, further pecuniary penalty shall be assessed.

“The Board, while unwilling to establish a rule which will have so broad an application, is conscious of the fact that the hours of labor in yard service, in some of the cases mentioned, are too long to insure that degree of alertness and bodily vigor which is necessary to prevent men from taking unnecessary chances.

“As the purpose of the request for overtime is to reduce the hours of work, rather than to increase the compensation, the Board has decided to deny the request for this rule, and to introduce in its stead, and as a substitute for rules 5 and 10

given on page 45 of the Confidential Preliminary Report, the following rule:

“ ‘Ten hours or less, shall constitute a day’s work, and the duties assigned to each crew shall be such as not to require a longer day’s work under average conditions. No new work shall be assigned after the expiration of ten hours, nor, except in cases of emergency, shall any new work be assigned shortly before the expiration of ten hours, if such assignment shall cause the men to work overtime.

“ ‘Yardmen will be paid pro rata for overtime. Anything less than thirty minutes of any hour will be paid for as one-half hour; anything more will be paid for as one hour.’ ”

But notwithstanding this talk about the desirability of simply limiting the actual hours of service, and not having any desire to add time and one-half for overtime or any other rates, no sooner was this award handed down than the men who obtained it agreed with the railroad companies to substitute a modified rule, and under date of April 25, 1910, they agreed in substitution for the Award the following:

“ ‘Ten hours, or less, shall constitute a day’s work. No new work shall be assigned after the expiration of ten hours.’ ”

And that is the situation, I think, under which the yardmen operate. I really don’t know whether that is really incorporated in the yardmen’s schedules at the present time.

But in the very recent Arbitration proceeding in the East between the Trainmen and Conductors and various Eastern Railroads, in which the Hon. Seth Low and Dr. John H. Finley were arbitrators, they also were called upon to rule on the question of overtime. And they said:

“ ‘The men have asked for a new rule to provide for the payment of overtime at time and one-half, instead of as now, pro rata. The payment for overtime pro rata is based upon the fact that the men’s time being taken should be paid for, but punitive overtime, if it is to be allowed, must be justified upon different grounds. The Board is in sympathy with the expressed desire to the men to reduce overtime as much as possible, and it recognizes that the payment of time and one-half for overtime is a well-established custom in the building trades, and possibly in some other trades. But, whether it prevails, so far as the Board is aware, the determination as to whether over-

time shall or shall not be paid for, rests with the employer. In railroading, it is quite evident that in many cases neither the management nor the trainmen can prevent overtime; and it appears to this Board, therefore, that punitive overtime as it is called, is an unsound principle when applied to the running of trains. The Board hope that some other method can be devised for reducing overtime; for it does earnestly believe that the hours demanded in Slow Freight and Construction Service are unreasonably long. If no other remedy can be found, possibly punitive overtime should be tried; but this Board does not deem it wise to adopt this rule at the present time.

"As to overtime in Yard Service, the intermediate members of the Board are less clear, because they are less sure that overtime in yards is beyond control of the management. They have declined the rule in Yard Service, however, partly because it has been recently disallowed by an Arbitration in Illinois, and partly because, not being itself sure, it has seemed to the Board unwise to disturb existing arrangements."

Now, it has been shown in this case, in connection with the talk about the possible eight-hour day, how you could simply arrange your crews, for three crews in a busy yard, and report at the end of every eight hours, that crews on the ten-hour shift in the Milwaukee Yards here were paid in this month of October a large sum of money; that large sums were paid to two engine crews at the same time, even on the ten-hour shift, with the spread of one hour that is permitted between the one crew being released and the engine being cleaned, and another taking its place. It was shown here that a large sum of money was being paid because of the lapped time. The man with the engine not released, engine not brought to a place where he could be released. The other crew, however, under pay because they were called to report for duty at that particular place, and their time began, and they were under pay.

Now, Mr. Trenholm well described the situation at St. Paul, back to the time of his own experience in connection with the yard there, how, often in the yard operation at 6 o'clock in the evening, your work arranged, thinking that you would be all through at 6 o'clock, and between 5 and 6 o'clock as many as six or seven trains showing up for delivery, containing perishable freight, stock, and so forth. And Mr. Keefe described how the

switching at Galveston was done, in response to questions by Mr. Carter, how a crew that would ordinarily be back at 6 o'clock may get back at 7, may get back at 8. Not under the control or operation of the management. This often represents the time of two crews at the one time, at the present time.

But what is the situation upon the road? Can there be any question in the world that it is not within the power of the operating official to say when he will or will not pay overtime? And as was stated by Dr. Finley and by Mr. Low, so far as their research disclosed, there is no case in any industry in which punitive overtime is paid, except where the employer elects voluntarily whether he will or will not incur it.

Now, if that be the foundation of it, and our researches have not disclosed any situation, and no one here has called attention to any trade or industry, or calling where that is not the underlying reason, where it is not absolutely at all times within the control of the employer whether he will or will not incur overtime—if that be the underlying reason of the rule, then we submit, that as stated by Dr. Finley and Mr. Low, punitive overtime, as it is called, is an unsound principle when applied to the running of trains.

The Chairman: We will now take an adjournment.

(Whereupon at 5 o'clock P. M. March 30, 1915, an adjournment was taken to March 31, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
ARBITRATION
between the
WESTERN RAILWAYS
and
BROTHERHOOD OF LOCOMOTIVE
ENGINEERS
and
BROTHERHOOD OF LOCOMOTIVE FIRE-
MEN AND ENGINEMEN
*under the Act approved July 15, 1913, by agree-
ment dated August 3, 1914.*

Chicago, Illinois, March 31, 1915.

Met, pursuant to adjournment, at 10:15 o'clock A. M.

Present: Arbitrators and parties as before.

The Chairman: You may proceed, Mr. Sheean.

Mr. Sheean: May it please the Board, at the adjournment last evening I had completed the discussion of Article 1; and as I proceed today I will endeavor to refer briefly to the arguments which are made in the printed brief on behalf of the employes under the several articles, as well as the points that are made in the brief filed on behalf of the Railroad Companies.

In our brief we first set up the part of the proposal of Article 1, which reduces to a basis of weights on drivers as the measure of compensation.

In the argument made on behalf of the employes, as I view it, nothing is said in justification of the particular classification here proposed. The argument is directly solely and entirely to the proposition that there should be some basis of weights on drivers.

As I said yesterday, by the Award in the Firemen's case on June 4, 1910, a uniform rate was fixed for simple engines having a cylinder 24 inches or over in diameter, and on compound engines weighing 215,000 pounds or more on drivers; and by the agreement of December 24, 1910, 215,000 pounds on drivers was also made a uniform basic point in engineers' schedules; the pro-

vision there, however, being that engines of that weight on drivers should be paid, as I remember it, 25 cents more than the next highest weight, on that particular railroad.

Therefore in this Western territory the only uniform weight on drivers basis throughout the entire territory is 215,000 pounds on drivers.

The Chairman: What is there that would render it inadvisable to have a weight on drivers basis below that limit, down to the lowest?

Mr. Sheean: Nothing, providing these gentlemen will permit the classification to be weights on drivers, and that alone.

As I pointed out yesterday, and as I pointed out in the brief, they have proceeded, both in the Arbitration in 1910 and in their negotiations in times past, to have it based upon a cylinder basis. In the case—which is merely illustrative of the general situation—Mr. Keefe, calling attention to one of their exhibits filed, showing what would be the rate if it were on a weight on drivers basis, called attention to the fact that on a passenger engine on the Santa Fe, an oil-burning engine on which the fireman's rate was \$2.50 previous to this Arbitration of 1910, in which the claim was made on the basis of weights on drivers, was given a rate of \$3.75, because of the large size of cylinders on that type of engine. They show by their own exhibit that that engine, if reduced to a weight on drivers basis, even at the high rate which they request here, would be entitled to only \$3.25; but they propose to hang onto this \$3.75, based on the cylinder basis, and to reduce others to weights on drivers. In other words, as I explained yesterday, the attitude, I think, of railroad managers generally, is that either cylinder basis or weight on drivers affords approximately a measure of the tractive effort, although both are open to inaccuracies and errors. In neither case do they always measure exactly what the tractive effort is. But the schedules having been built upon the theory of size of cylinder, the gradations agreed upon as between the men and the several companies that the cylinders should measure the rate of compensation, and the spread should be made as between cylinders of different sizes, it is and was that if they prefer a weight on drivers basis, it should be solely a weight on drivers basis.

Therefore, I say, as I said yesterday, that if this Board desires to go to a weight on drivers basis, and in fixing a weight on

drivers basis provides as a part of that Award that the particular railroad upon which the weight on drivers basis is elected, shall go solely to weight on drivers, and eliminate all other classifications in compensation or measuring pay, I can see no particular objection to doing it.

The Chairman: What percentage of engines come within the class referred to by Mr. Keefe, that is the class that they say would be reduced in the event we should adopt weight on drivers?

Mr. Sheean: That is shown on the several roads by the exhibit carried out as to each road, showing what their classifications are now, and what they would take if put on a weight on drivers basis.

The Chairman: Well, by an examination of your exhibits then, we can readily ascertain as to the proportion of engines that would be permitted to take it?

Mr. Sheean: How they would be affected, yes. It is Exhibit No. 1, in which each road was asked to carry out what the present rate was on these particular engines. It would disturb the present arrangement very markedly. In some cases they are based on the classification of cylinder basis. A large number of engines now take the same rate that would be spread between perhaps two or three rates. Some that take high rates because of their cylinders would fall into a smaller classification on weights on drivers. If it is preferred, that they go from one to the other and it can be done in such a way that it shall be either the weights on drivers or the cylinder basis, there can be no great objection to doing that. And if a schedule can be built so as to fit into the weights on drivers basis, and adjust itself to that.

The Chairman: Don't you think in the long run, if some means could be devised by which there could be a standard method of ascertaining the proper weight, that it would be better for the railroads and better for the men to remove that sore spot?

Mr. Sheean: That was the belief of this committee in endeavoring to have open for consideration each and every item of compensation, so that a board of arbitration might in fact take a step toward uniformity. That was our object and desire,

and it is the belief and was the belief that uniformity, so far as it is permissible, is a desirable process.

Mr. Burgess: Mr. Sheean, pardon me a moment, but I don't quite follow you. You say they propose to hold the high rate. Is that through the saving clause alone you refer to?

Mr. Sheean: Yes.

Mr. Burgess: And that only?

Mr. Sheean: Yes.

Mr. Burgess: That is all. I didn't know but what you referred to some other rule that held that.

Mr. Sheean: No, no, I mean, Mr. Burgess, by virtue of the saving clause, wherever rates are higher. Here on the cylinder basis, with Mr. Keefe's engine, with weight on drivers basis, even if the request were granted in its entirety, that which takes \$3.25 takes \$3.75 because of it having a large cylinder.

Mr. Burgess: I understood that pretty well.

Mr. Sheean: Now, the saving clause, with rates that way, that particular classification takes the higher rate, \$3.75. We will hang on to that engine rate at \$3.75, because the big cylinder gives it that. Therefore under the saving clause, a rate fixed on that classification of that schedule is higher. Therefore, the men of that road are under this saving clause, unless by the award it was provided that any road which went to a basis of weight on drivers should accept in its entirety the whole classification with engines on weights on drivers, and this alone. But it would simply lead to chaos.

Mr. Burgess: But, Mr. Sheean, would not that be impossible, if we respected the terms of the agreement to arbitrate the questions before us now?

Mr. Sheean: If you wanted to take that hard and fast interpretation in view, yes; the Board of Arbitration might, in view of the saving clause, if thus interpreted, leading to chaos, decline to award a basis of weight on drivers, or they might, in fixing a basis of weight on drivers as a condition to that award and as a part of the award, provide that this award shall be effective only upon such roads as see fit to adopt it in its entirety. They could adopt either the one or the other.

Mr. Burgess: But, as I understood you, Mr. Sheean, you say that the railways have no particular objection to the weights

on drivers, were it not for these high points that you have specified, in one instance.

Mr. Sheean: No, I did not mean the high points. I meant it should be one system or the other, and not necessarily the high points. If the men prefer that the classification shall be weights on drivers rather than any other classification, have it that, but have it that alone, and not an admixture of other methods.

Mr. Burgess: But would not the Board be confronted with the fact that if they reduced one of these high rates, we will call them, that you particularly referred to, it would be a violation of the agreement to arbitrate?

Mr. Sheean: Oh, no, because their award would not require any man to violate it. They could provide by their award that any person or railroad could accept or reject this part of the award in its entirety, therefore, they could not reduce anybody's wages. If they preferred to have what they have, they could have it, and hang onto it. Just as has been done in practically every award handed down, and I refer only to the Eastern Firemen's Award that "The earnings of firemen in any class of service shall not be diminished by the provisions of this award; and if the rates that were higher or the conditions that were better antecedent to this award are necessary to guarantee this requirement they shall be maintained. Neither shall the earnings of the firemen, in any class of service, be increased above what the higher rates of pay and the conditions that were better antecedent hereto guaranteed him, by a combination of the rates herein established with the conditions of service antecedent hereto, or vice versa."

And there is no possible way, nor has it ever been the purpose or intention of the Committee that there should be forced upon the men on any railroad a reduction of their pay. If they prefer the cylinder basis because that cylinder basis, as they view it, is more desirable to them than a transfer over to the weight on drivers basis, why, it is for them to elect which is the better. And as I say, the views expressed by both Mr. Trenholm and, in a general way, by Mr. Tollerton, are that either one or the other method measures with approximate accuracy the increasing tractive effort of the engine. Of course Mr. Tollerton called attention to the fact that the schedules now had been built up on a cylinder basis; and fitted into a cylinder basis, they were

built on that theory. There is not, I think, so far as I can ascertain, any real and substantial difference in measuring with a fair degree of accuracy the tractive effort, whether you take the one or the other. Neither is an absolutely accurate measure.

In the Eastern Engineers' case, Mr. Worthington, as Mr. Stone and Mr. Carter have both stated, insisted upon the weight on drivers basis as more nearly measuring tractive effort, while Mr. Stone's position was at that time, "We believe their claim for the weight on drivers to govern is not as fair as our claim for size of cylinder to govern, because the cylinder is really the greatest factor in determining the tractive power of the engine."

So, in the West, when Mr. Nixon wished to go to the basis of weight on drivers, as to this large and excessive superheater rate, where these engines had excessively large cylinders, and Mr. Nixon was anxious to have that particular \$3.75 rate put on the basis of weights on drivers, because of the omission as shown, I think, by the discussion before the Arbitrators there, the failure to call attention to the fact that certain types of superheater engines had very large cylinders without really any corresponding increase in the work of firemen, Mr. Carter's attitude then, representing the firemen, and having secured in this Arbitration of 1910 this excessively high rate because of the cylinder basis, replied to Mr. Nixon as follows:

"January 23, 1911.—Since receiving your letter of January 19, 1911, and since our last conference, our committee has spent the time in day and night sessions attempting to devise some means of carrying out your request that the special rate of \$3.75 per day that a basis of weight on drivers be substituted for the size of cylinder.

"It appears to me that because of the many classes of locomotives in use on the lines represented and their various weights on drivers, it is impossible for our committee to agree among themselves to such a change of basis. Many propositions have been drafted, only to be complicated by the recitations of local conditions.

"The difficulties of the situation are made more intense by the fact that when the call was issued for this meeting, our members on several lines of railway instructed their respective chairman not to deviate from the Arbitration Award, as inter-

preted by the Arbitrators. I can express the situation in no better language than to quote from a former letter:

“The committee has been advised by counsel that without specific authority from all interests represented, that we would have no legal right to deviate from the Award as interpreted by the Arbitrators. They have been advised that without the specific authority granted through a referendum vote, they would have no legal right to reduce the benefits of the Award and should they do so would probably lay themselves liable to the charge of betraying the rights of their constituents.

“It appears to the Committee that your committee is in a similar position, and that neither committee cares to assume authority to place additional burdens upon the respective interests that the two committees represent. It is just as evident that both committees are ready to assume the authority of changing the Award so as to benefit their respective interests.

“Regretting the situation as much as we do, our committee instructs me to say that they cannot assume authority to waive any of the rights accorded to their constituents under the Award as interpreted by the Arbitrators.”

Now, in that situation where, as stated by Mr. Stone in the East, and as appears from the record here in the West, the schedules have been built up upon the cylinder basis, upon the insistence of the men, now, we submit, in all candor, that the only possible or feasible way in which to bring about a change from the one to the other, is to abandon the inequities that exist under the one method and reduce it to the other. The one, in the judgment of the committee, will about counterbalance the other. There are certain inequities and inequalities that will be brought about by this rough approximation in either way, but it is not fair and it is not right that they should hang onto the inequities brought about by one method, having obtained them by arbitration, having obtained them by contract, and then hang onto those inequalities and ask to apply the other system and see where that may, in places, bring other and higher compensation than the method now in vogue.

I endeavored quite fully to ascertain from Mr. Carter while he was on the stand as to where he got the starting point, or where the committee got the starting point or the breaking point on any of these proposed weights on drivers, why he

started at 80,000 pounds and why he divided that 100,000 pounds; and the record is absolutely barren of any proof as to why any one of those figures or any one of those breaks is made, or what relationship it has to the work of engineers and firemen.

It is only fair to state that in the Eastern Firemen's Case an award was made which started with 80,000 pounds. Upon an examination of the proofs and record in that case, I do not find that any particular point was made or inquiry made as to why or wherefore any of those breaks were made use of. But in the proposal here made, or here submitted, while the starting points are the same, they have added intermediate classes for further rates even than in the Eastern Award, creating an additional plan and an additional rate; and at page 37 of our brief I set out the Award in the East, so that you may easily compare what actually was awarded in the East and what was requested here.

The Chairman: Does the Eastern Award provide a minimum rate for all engines below 80,000 pounds on drivers?

Mr. Sheean: Yes, it provides a rate of \$2.45 for firemen, and the request here is for \$2.90.

Of course the request here is for a minimum rate. Now on what possible theory is there a justification for different minima as between different territories?

I have never been able to understand or comprehend the theory of an arbitration which is in substance and in effect a request for the fixing of minimum rates that would fix for one territory a different minimum from the minimum provided in another territory.

In the Eastern case, as Mr. Stone said in his argument in that case:

"Gentlemen, there is no good reason why a man should go out of the yard in Chicago with the same class of engine, and start west for \$5.40 with 1,800 tons, and take the same engine in the Lake Shore yards and start east with 3,500 tons for \$4.85."

Now we are confronted with that situation here. The award in the East on this basis of weights on drivers has throughout, rates awarded, rates in existence, rates paid, markedly lower than the rates requested here. There is also a splitting here as between 200,000 pounds and 225,000 pounds, taking a separate rate, whereas in the East they are all put in one

class between 250,000 and 300,000 pounds; and this was their request in the East. I think there was no change made in the split or breaking point as between the award and what was requested.

The Chairman: Were the rates that were granted in the Eastern Arbitration lower than the rates that obtained at that time in the Western territory?

Mr. Sheean: Yes. Of course in the Western Territory there is no basis of these weights on drivers; but by carrying out—I would not be able to say as to each and every road—

The Chairman: I understand.

Mr. Sheean: But I think that, speaking generally, taking the rates which we are now paying in the West, if you take them and average them as one system, the rates paid in the West are fully up to the rates awarded in the East.

Mr. Nagel: Mr. Sheean, may there not be some difference between the two territories, the East and the West, with respect to general economic conditions, general wage conditions and even the conditions under which the work is done?

Mr. Sheean: We have endeavored to cover that, Mr. Nagel, in our Exhibit 39. Unquestionably, there is a Western wage zone. Unquestionably, in the sparsely settled territory, rates of wages of laboring men of all classes have been higher than in the more thickly settled territory in the East. Undoubtedly with the development of the country, with the getting away from pioneer days and hardships, there has been a coming together of the cost of living in the West and in the East. Of course, in pioneer days, in sparsely settled territory, the cost of living was higher in that territory. Conditions of living were not as favorable. A higher rate of wage was established. The nearer the frontier you go, the nearer you get to the mining camps, the higher the rate of wages; and our Exhibit 39 endeavors to show the comparison between the districts, and the growing together, where now the cost of living, the cost of food, the cost of clothing, the cost of rent, the cost of light and fuel in the West has come down to the cost in the East. There has been a gradual growing together. There may have been different conditions in times past, based on frontier conditions and the conditions generally surrounding life, high cost of living and the other elements that enter into the making of the

higher wage, but these have gradually disappeared, and in a movement of this character at this time, as we think we show by our Exhibit 39, there is not a disparity in conditions that would justify the payment of a different minimum wage in the West from the minimum fixed in the East; because in the end the award in both the engineers' and firemen's cases, and the request here, is for the fixing of a minimum wage.

Now, in that situation, with the showing made of comparison between the East and West, conditions of living, general coming together of the cost of commodities, as well as the scales of wages in all lines of employment, we submit that at this time, on the fixing of a minimum wage, there is no longer the justification that there was when railroading in the far West was what railroading now would be like in Alaska. And that, I think, is quite clearly shown in this study that we have submitted as Exhibit 39—that is, the study conducted under the supervision of Mr. Vance, as to the conditions in these various highly organized centers in the Western territory, and the same conditions in the East, both as to wages in the various crafts and callings, and also the cost of living, cost of articles of food, clothing, rent, light and fuel, and the other articles that enter into the budget of the average working man.

But I think we are in line with Mr. Stone's statement on that proposition in the East, that there was not any reason why the Rock Island in the West should start out of the same depot with 1,800 tons going West, and the Lake Shore start East, with 3,500 tons, and the Lake Shore pay less money to its engineers and firemen than the Rock Island paid to its. And especially is that true when you are fixing only a minimum rate of compensation that was to be paid.

Now, by the Firemen's Award of 1910 a differential was established between oil and coal burning engines, and a considerable part of the brief filed on behalf of the employes is in support of the proposition that the present differential of 15 cents less per day for firemen on oil-burning locomotives should be eliminated, and the rates requested herein should be awarded on all locomotives. And then a number of propositions are stated, that in other industries lower wages have not been paid because of the introduction of devices that reduce physical labor.

Now, there has never been any reduction of wages, either in

the Arbitration of 1910, or is any proposed at this time. A request was made in 1910 for increases. A request is made for further increases at this time. The increases were granted, but not as large an increase was granted to those on oil-burning locomotives, as the increase granted to those on coal-burning locomotives.

Now, it does seem to us that the argument for increased compensation applicable to oil burners has wholly failed to meet the situation. It is not claimed, and cannot be claimed, that the amount of physical labor required of a fireman on an oil-burning locomotive is at all comparable with the physical labor and effort of the hand-fired coal-burning locomotive. It is true that there does remain the responsibility that all firemen have, less the physical labor which those on the coal-burning locomotives have. The logical basis of the fireman's pay, as it seems to me, would be the minimum rate of pay in the particular class of service in which engaged. That, of course, is not feasible under the proposition here. There is only a differential of 15 cents established, but by logic and by reason, the fireman on an oil-burning locomotive, having only the responsibility which all firemen on engines in that class of service have, having that responsibility, less the physical labor that his fellow fireman has on roads which burn coal, it does seem to me that the logical basis of his pay would be the minimum pay in the particular class of service in which he is engaged.

But we submit that no reason here, no sound reason has been advanced for disturbing this differential established by this other Award; not established in that Arbitration Proceeding by reducing anyone's wages, or anyone's compensation, but simply not granting to the oil-burning locomotives as great an increase as was granted to those on the coal-burning locomotives of certain type and style.

Mr. Carter here took the position that this graduated scale of wages should be applicable on all coal-burning locomotives, as well as on oil-burners, and that, irrespective of the question of superheater attachments being installed, or even mechanical stokers provided, stating that he would expect a fireman on a mechanically stoked engine to receive the same progressive advance in pay as on a hand-fired engine.

Now, as to this portion of Article 2, we suggest to the Board

that there has been absolutely no evidence offered supporting any of the divisions which are proposed in this article, as to why they start at a particular place, or why they divide at a certain weight on drivers.

Mr. Nagel: I would like to know for information, if the amount of labor performed by the fireman has ever been taken in any schedule as the basis on which to fix his wages, the amount of labor performed?

Mr. Sheean: Well, I should assume it was, undoubtedly, because with the installation of each of the larger engines, the request for the increase has always been: "Why, how much more work we have to do." It is a direct and appreciable and persuasive argument that when you substitute a larger engine for a smaller engine the fireman is required to shovel more coal in the creation of more steam, and the real underlying foundation in all of these graduated scales that have grown up through all these years, is that the fireman upon the larger engine has done more work than upon the small engine running the same number of miles.

Mr. Nagel: And you contend that the acceptance of Mr. Karn's theory in respect to oil burning engines would result in the elimination of the effect of the testimony that we have heard as to amount of labor, hardship, exposure, etc.

Mr. Sheean: Absolutely. It seems to me, if the Board comes to Mr. Karn's theory, of course we can at once forget all about the number of tons of coal that are shoveled upon the trip, and the asbestos aprons, and all the other things that are recited, and the hard work and strain on physical endurance, that comes with the shoveling of a large amount of coal. Either the one or the other must be the foundation of the graduated scale, predicated upon the hard work, the increasing hard work. Mr. Karn baldly stated that the compensation should be based upon the output of the machine, irrespective entirely of any question how the man on that machine accomplished the results.

Mr. Nagel: Well, then, I suppose you would say that if one standard is to be accepted before the other, you would prefer to have the hardships of the oil burning engine?

Mr. Sheean: The railroad managers, I think, have appreciated that firemen should be compensated commensurately with the work that they perform. They can appreciate and readily

understand that with the larger engines which require more coal to be shoveled, there is a proper justification for an increase in the compensation of the fireman who has to shovel that coal.

The Chairman: You do not understand, though, that this Board, sitting as a Board of Arbitration, would be bound by the testimony of any witness who may have testified as to any particular theory?

Mr. Sheean: Oh, no.

The Chairman: But that we may take all the testimony of all the witnesses, and consider all the facts bearing upon this case before we reach an equitable conclusion as to what should be done?

Mr. Sheean: Unquestionably yes, your Honor. The point simply is that there are two conflicting theories here advanced. The Board in the end must accept one or the other theory as the fundamental basis of a graduated scale of wages.

The Chairman: You don't think we could plow through both theories if we saw fit to? We may have a theory of our own.

Mr. Sheean: Yes, undoubtedly. And the theory evolved by the Board may be something that does not proceed on either one advanced here. But the theory that the scale should be graduated, irrespective of work and responsibility, is, as it seems to me, inconsistent and irreconcilably inconsistent, with the theory that the wages should be based upon additional labor. One or the other is sound.

There may be some other theory that is a better, more complete theory for the fixing of the wages of firemen and of engineers. But the point that I was making, or attempting to make, is that those two theories, the output of the machine being solely the measure, and the other theory that labor and work performed is the measure of compensation, are in irreconcilable conflict.

The Chairman: I understand your contention. I fully appreciate it.

Mr. Sheean: Before passing that, there was just one other point that I wish to call attention to on that proposition, Article 2. You will note that the wages of both engineers and firemen are graduated on the weight on drivers basis up to 250,000 pounds and over. Weight on drivers theoretically measures the tractive effort. Then they provide, however, that a Mallet

engine of 250,000 pounds on drivers takes for engineers a \$7.50 rate as against a \$5.00 rate of an engine of the same weight on drivers. In other words, they get up to a certain point on the weight on drivers basis and then abandon that weight on drivers basis to fix a different basis. That is, if the tractive effort is to be the measure of the compensation, that tractive effort, measured by weight on drivers, would be measured in a like manner of a Mallet engine. Nevertheless, they bring it up purely on the weight on drivers basis to \$6.70 in freight service for engineers and \$4.50 for firemen, and then on a Mallet type of 250,000 pounds, provide \$7.50 for engineers and \$4.90 for firemen. 250,000 pounds and less than 300,000 pounds, the engineer has \$7.75 and \$5.10. In other words, there is in this proposition again, an inconsistency in theory, that tractive effort as a measure is abandoned as between different types of engines.

The Chairman: Why do you understand that is done?

Mr. Sheean: The point that is stated by Mr. Carter is that a Mallet engine is in fact two engines coupled together in a manner that makes it possible for railroads to operate them with one engineer and fireman, thus saving the expense of one engine crew.

But here they say that it makes no difference, in the first part of the proposition, that you are going to take the weight on drivers, whether it be one engine, two engines, or what not, as measuring the tractive effort, but because it is a particular type and style of engine, of coupling two engines together, and nevertheless, the weight of those engines thus coupled, the added weight, the combined weight of the two engines is 250,000 pounds, because two engines added together make a total of 250,000 pounds on drivers it takes a higher rate than if a single engine had the same weight on the drivers.

Now I cannot follow them in the suggestion that if weight on drivers is to be the measure in the two cases all the way through, why there should be the breaking point. But this is the statement made, simply because these two engines coupled together, whose tractive effort is, of course, measured by the weight on drivers, if this theory be sound, nevertheless it does not fully measure it in the case of the two engines, whereas they say it does measure it adequate and fairly in the other class of engine.

Mr. Burgess: Do you hold that the care of two engines is no greater than one?

Mr. Sheean: The care?

Mr. Burgess: Yes.

Mr. Sheean: I do not know that I quite follow you.

Mr. Burgess: Well, it is reasonable to assume that an engineer and fireman have the care of the engine after they take it out on the road.

Mr. Sheean: Just in what way? I do not follow you.

Mr. Burgess: He runs the engine and takes care of the machinery, from the pilot to the rear end of the tank. Now, if you have two engines—

Mr. Sheean: What do you mean by taking care? I do not follow you on that.

Mr. Burgess: Well, oiling the engine and adjusting anything that may be necessary, and taking care of the machinery, the same as taking care of any machinery.

Mr. Sheean: I suppose all of that, the taking care of the machinery, would be in case of a breakdown, and he would go on overtime in either case, but I do not know of any reason why his rate should be higher if he was engaged in repairs on the one engine than doing it on the other.

Mr. Burgess: We would assume, if you are advancing the theory for the railroads, that with the Mallet, all the engineer would be required to do would be to take care of one engine and let the other machinery take care of itself on the road.

Mr. Sheean: I do not follow you as to what you mean by taking care. If there was a breakdown and doing some running repairs on the railroad?

Mr. Burgess: No.

Mr. Sheean: More parts to oil before he starts out, do you mean?

Mr. Burgess: Well, that is one of the things. There are many things to take care of on an engine which could not be described except by burdening the record at great length.

Mr. Sheean: Granting your premise, Mr. Burgess, possibly, if that be the case, the point I am trying to make is if you are to measure the pay solely on weights on drivers, as you do in all other cases, you are now interjecting here a different element, that, in addition to weights on drivers, you are going to

count the number of parts of the engine or resort to a particular classification.

Mr. Burgess: Not at all, but there is quite a difference in taking care of two engines and taking care of one.

Mr. Sheean: Then if there be, the basis of weights on drivers would not be a fair measure of the compensation.

Mr. Burgess: I understood you to say that where they reached the point where a Mallet was two engines practically coupled together with a frame instead of a drawbar, that they then abandon the policy of the weight on drivers and base the rate of pay on that particular class of engine—

Mr. Sheean: On the fact that it was a Mallet?

Mr. Burgess: On the fact that it was a Mallet, because it has not been proven that that was not two engines. And what I wanted to know, Mr. Sheean, was if you advanced the theory that an engineer should not receive greater compensation for taking care of two engines than taking care of one?

Mr. Sheean: I perhaps cannot follow you on the taking care of. My understanding of the operation is that the engineer, while the engine is running, operates those two engines in precisely the same manner as he would a single engine.

Mr. Burgess: You are referring now to opening and closing the throttle or operating the brake valve, possibly, or the reverse lever?

Mr. Sheean: Yes.

Mr. Burgess: But there are other duties connected with running a locomotive than those three things that I have just mentioned, are there not?

Mr. Sheean: Oiling before he starts, yes.

Mr. Burgess: Well, in the general care of the machine.

Mr. Sheean: Now, general care; what thing, what act?

Mr. Burgess: Well, as I said, it would take quite a long time and would burden the record, and I do not think it is proper, but I am perfectly willing to let it go, if you will state that there is no care for the second engine.

Mr. Sheean: Well, I cannot say yes or no until you tell me what you mean by care. As I say, my understanding is that the Mallet engine, when it is running and operating, the engineer does on the Mallet engine precisely the same thing that an engineer would do on an engine of another type.

Mr. Burgess: Then how do you reconcile, if there is no care, that statement with the fact that every railroad manager, by mutual consent, has recognized the fact that there is greater responsibility or greater care with the Mallet engine than there is with the single engine?

Mr. Sheean: Well, do you mean in the higher rate of pay?

Mr. Burgess: That is one of the reasons. They conceded a higher rate of pay by mutual agreement on every railroad in the United States and Canada, when a Mallet was operated, because they did state that the Mallet required greater care, there was double the machinery to care for, and without any Board of Arbitration or mediation, they did concede a higher rate in every class of service in which that engine might be employed.

Mr. Sheean: I understood the principal argument was that they could not make the miles with the Mallet.

Mr. Burgess: There are many arguments. It would be very lengthy, of course, to go into that and resurrect all the arguments; but based on your research of the various schedules, you will not deny that the management have recognized that principle.

Mr. Sheean: Oh, yes, they pay a higher rate on them undoubtedly; and my point was simply this, that up to this place you say weights on drivers shall measure. Down below that you do not make any distinction between a 2-10-2 and an 8-wheeler. There are more parts on the one to take care of than on the other. The question of parts to oil is ignored, and the type or style or how many drivers or anything of that sort. You have said the measure of it shall be the weight on drivers; but when they get to the Mallet it is not merely the weights on drivers, but it is weights on drivers plus something else.

Mr. Burgess: But there is a great difference between adding one pair of drivers more, making say six drivers, and two complete engines; and the Mallet is two engines coupled together.

Mr. Sheean: All the point I sought to make in that connection is just as in connection with the oil burner. Mr. Karn's theory is that the output of the machine is the sole measure, and that we should ignore all the parts and all the mechanism and everything else as to how they bring about results. So that the theory of tractive effort as a basis throughout is inconsistent

with the theory of counting the parts, and what parts you have to oil, and what care you have to add. In order to be entirely consistent, either the one or the other should be adhered to.

Mr. Byram: Is there any difference between your argument as applied to the engineer and the fireman on the Mallet engine, in the points you have just been discussing with Mr. Burgess?

Mr. Sheean: Mr. Byram, I understand the argument is made here as to responsibility throughout. The hostler is responsible for putting the supplies on an engine. The engineer is responsible to know that they are on. The fireman is responsible for knowing that the engineer knows that the hostler has done his work. So that they might carry over this question of care of the fireman as to parts, because he is on the larger engine, in the same way. But of course as to the fireman, measured in work, getting over again to the proposition of measuring in work, I cannot see how, where the basis of weight on drivers or tractive effort is to be made the measure of the fireman's compensation, it can make any difference to the fireman as to the amount of coal that is shoveled to produce that tractive effort, or the work that is done by the fireman, whether it be on the Mallet or on the simple engine.

At page 38 of our brief we take up the next part of Article 2, the proposal which seeks to throw into a single group, pusher, helper, mine run, work, wreck, belt line, transfer and all other unclassified service.

Now, it was pointed out here by Mr. Trenholm, how this expression "unclassified service" would open up the possibilities of endless discussion about business specials, milk trains that were not scheduled, and distribution of cars along the road. And so, in connection with the different articles here enumerated, it is shown that pusher and helper service, for instance, cannot be measured by any hard and fast ironclad rule as to what particular rate it shall take. In other words, pusher service on a mountain is a far different proposition from the pusher service in sending a passenger train out of the yard in St. Paul. Mr. Cadle, when he was on the stand, stated that this proposition contemplated that any engine which at any time in the day does helper work shall get helper pay; that a yard engine helping

a train out of the yard would be paid 100 miles for pushing out of the yard, and also paid for a day in yard service.

Now, the only helper service that was described here was that on the Southern Pacific by Engineer Jones; on the Canadian Pacific by Johnson, on the Milwaukee & St. Paul by Hodges, and by Crylie on the Denver & Rio Grande.

This helper service was shown, by the description of these witnesses, to vary widely as between the different roads, and their necessities and needs, and how they adjusted the pay of the men to meet the peculiarities of the different situations.

Mr. Trenholm called attention to the fact that, in St. Paul, practically every train, whether freight or passenger, is helped over a short grade getting into and out of St. Paul. It is done by the yard crews there. Six or seven trains will come right in, within the short space of two or three hours. You could not have a helper assigned just to do that work, because it bunches up in such a way that you will have to use practically every yard engine at some time during the day for a short space, to push one train up.

Now, the rulings and interpretations of Dr. Neill, which are filed here, show just what the consequences of an award such as this in the Eastern Territory have been; that claims are actually made for the service of having a switch engine go out to help a train out of a yard, a distance of 100 yards, as Mr. Cadle said; and your Honors will remember the colloquy between Mr. Shea and Mr. Trenholm. Mr. Trenholm has a provision in his schedule for helper service. They have certain points on their lines where helper service is maintained. Through all these years, the men upon that road have never questioned the application of that schedule, for any yard helper service it was intended to provide for. But here, running through page after page, is not merely the intimation but the practical argument made by Mr. Shea that because in that yard switch engines are used to push trains out of the yard, that that schedule is being violated, that every switch engine that goes for half an hour to help a train or two trains in getting over this one starting grade should take the through freight rate instead of the switching service which is now being paid.

If your Honors please, by resorting to our Exhibit 1, it will be shown that the helper service and helper needs of practically

every railroad are provided for. These roads in Western Territory do have helper service to meet the varied conditions. How can any one say that this situation at St. Paul, a grade where passenger trains must all be helped a short distance out of their passenger depot, is comparable to the situation on the Denver & Rio Grande? Is it just and equitable that this straight-edge rule should be applied to cover such a situation as to schedule, and at the same time applied to the situation in getting up over Marshall Pass? That is what they propose to do. What justification is there for it? Why, our exhibit as to pay-rolls shows that these men in helper service, averaging all the assigned helpers in that month, got over \$200 a month, taking it in the territory as a whole. The schedule that provides for the particular helper service is made to fit the situation on that particular road. There is no reason in the world why helping out of a switch on the Alton, if you please, that we referred to here yesterday in talking about that—a pusher engine to get trains out of a coal mine onto the main line,—should receive the same rate of pay as these men helping passenger and freight trains up over Marshall Pass, or the services that Mr. Jones described here through the tunnel in the Siskiyou.

In other words, it is again the situation of preserving all of these peculiar provisions that are made with reference to helper service. On the Denver & Rio Grande I do not know, and would not attempt to say, how many miles constitute a day, whether it is 38 or 40 or 50, or whatever it may be, and then attempt to add on to that a provision applying through freight rates to all of these varying situations and all of these varying provisions concerning pusher and helper service.

I invite your Honors' attention particularly to this Exhibit 30, in the same way that I did in connection with passenger service. Just look at Exhibit 30 to see what the pusher and helper men are receiving at the present time. What proof was offered here in support of the suggestion that there might be and properly should be the uniform application of through freight rates. Some receive one rate, some receive another rate. Why, gentlemen, there are passenger trains in this mountain territory that are helped regularly, and helpers are assigned solely and purely for the purpose of helping passenger trains. Now what the provision in the schedule may be of course can

be ascertained by reference to Exhibit No. 1, but it is a condition peculiar to each road, and there have been built up on each one of these roads schedule provisions by agreement with the men to meet the peculiarities of the situation in which helper service exists. Now I submit, no single witness called upon the stand here with reference to helper and pusher service has shown that his earnings were small under the schedule under which he was working. No situation on any railroad has been described in which the living conditions or working conditions in pusher and helper service, under which the man made his pay, were such that there should be an increase in the compensation.

The Chairman: We will take a short recess.

(Whereupon a recess was taken for ten minutes.)

The Chairman: You may proceed, Mr. Sheean.

Mr. Sheean: On this pusher and helper proposition, we invite your attention to Railroads' Exhibit 1, where it is shown that a great many of the roads provide a fixed monthly rate of compensation for helpers at different points. This monthly wage may vary and does vary for different roads, upon different parts of the road, so as to be adjusted to meet the peculiarities of the particular situation. Of course the pusher and helper service is more nearly comparable to other situations where a fixed monthly wage fairly measures the service and responsibility of the work there performed. The men are at their homes. They have a reasonably fixed and regular service to perform at those points, and there has been, as I suggested, no showing here that the rates paid at any of those places where assigned pusher service is maintained, are unfair or unjust to the men, or that the compensation does not measure fully up to the service performed at the particular point or points. The various schedule provisions are assembled in our Exhibit 1 under the head of Helper and Pusher Service.

It is also proposed to place mine run in this general classification. There were two witnesses who described, on behalf of the employes, the details of the mine run, one on the Rock Island between Centerville and Numa, in which the whole distance covered was eight miles, doing switching service at various mines and industries. And Mr. Richardson described switching operations during the ore season on the Duluth, South Shore & Atlantic; and there the entire distance covered in these switch-

ing operations was an extreme distance of four miles from Negaunee, down to half a mile.

Mr. Trenholm gave examples of actual runs here; one on the Rock Island of a mine run, showing that the effect of the proposals here would be to increase the engineer 720 per cent and the fireman 725 per cent in their present compensation. Another example, on the Missouri Pacific, showed that these proposals would bring about an increase of 300 per cent. Of course there is no exception here on account of the automatic release on the proposition. But as to the mine run service, whether that should or should not be placed upon a through freight basis, or whether it should take purely a switching basis, or whether it should take an intermediate rate, must, of course, be determined by the peculiarities of the particular situation.

Now, what was described here by Mr. Ellis, at Centerville, Kansas, is no different in the responsibilities or care or work from the work ordinarily performed by a switching crew in industrial switching. It is precisely the situation that is carried on as to other industries by people who get a switching rate of pay. Now, I grant you, that a particular mine run may be more nearly comparable to through freight service than it is to switching service. But, again, the position of the conference committee is that the straight-edge cannot be applied to these mere words "mine run," and say that in all situations, merely because described as a mine run, the rate shall be the same as the through freight rate. And, again, it is shown by our Exhibit 1, that mine runs, where there are mines on the different railroads, are specifically covered by present schedule provisions, and there is no showing that the particular rate which is paid upon any of these railroad companies is itself unfair or does not measure up to the service upon that point.

But even if that were shown on a particular run on a particular railroad, the proposition would still remain that the application of the straight-edge, so as to say that my own run shall at all times take a particular service, or pay the same as any other service with which it may or may not be comparable, is injecting into the situation a rigidity which ought to yield to the peculiarities of the different situations, and that is the way that it has been treated by the railroads, and is the way in which it is handled at the present time.

And so, as to work and wreck service. Our Exhibit No. 1 shows that practically every railroad now has specific provision as to compensation in work and wreck service. Now, what witness was called on behalf of the employes that showed any injustice was being done under any one of these schedules at the present time, in work or wreck service? Examine this 7300 page record, and you will not find a witness. I have not found a witness. If there was any whose testimony was given here, I have been unable to locate it, as showing that there was any injustice done any employe on any one of the railroads under the present schedule as to work and wreck service.

Now, not only does our exhibit show, but Mr. Cadle very frankly admitted that there was a great variety of provisions in the different schedules as to allowing mileage to and from the wreck, or the work, for instance, and time while at the place of work. That some schedules pay for Sundays and holidays when they are on assigned work service. Others do not. Some when assigned to this particular work are placed upon continuous pay, Sundays, holidays and all other time, although there be no work done upon those days. And he frankly admitted that it was the proposal, and purpose of this proposal, to retain all of those special provisions whereby the peculiarities of the work have been measured and adjusted and agreed upon in the different schedules. And if you found a schedule which gave a man pay for Sundays, pay for holidays, although he didn't work, and in that particular schedule it might be that they had a special work train rate, why, nevertheless, he would spread this rate, this through freight rate over this great variety of bases, and thereby bring about a complete disparity as between different railroads.

In other words, gentlemen, the application of a particular rate to different underlying rules, will bring about disparity instead of uniformity. One railroad company pays a high rate for six days in the week. Another railroad company conceivably will pay a lower rate but agree that they shall be extended over the full seven days, although there is no work done on Sunday in work train service. The pay of the men at the end of a particular period will be probably about the same upon those two railroads. Nevertheless, it is proposed to let these different bases stand, but spread this through freight rate, what-

ever it may be, over the entire service, and apply it to all of these varying conditions.

Now, the mere fact that a particular work is work service, does not make it identical service through this great Western territory. What comparison is there between work being done upon the Chicago & Western Indiana in track elevation here in Chicago, and work being done out in the Siskiyou? How can you say that a rate should be spread, and adjust the same rate merely because it happens to be work-train service, through a territory as vast as this?

Now, the fact is that these different schedules have made provisions as to work service, specifically made and agreed upon to meet the peculiarities of the particular situation. To send out a construction gang into a sparsely settled part where there is work being done upon a new line after it is an open and going line—because construction work would not be a fair comparison—but a new line in a sparsely settled country where new rails are to be laid, new work done, work out there, measured under the schedule of that particular railroad, need not be placed upon the same basis of comparison with through service that you would place the track elevation work in Chicago here, of these lines, which is done and must be done for a great many years to come.

And yet it is here proposed: Why, just give us this work service throughout this whole territory by a uniform straight-edged rule; notwithstanding the fact that the whole service is treated separately by separate rules; in the different schedules, we will let those separate and distinct rules stand as they are, but apply this one straight-edge to the various bases.

And so I say as to Belt Line and Transfer service there would be the same result brought about. There is one line here, the Ft. Worth Belt—that is its name, the Ft. Worth Belt—and under the testimony of the employes' witnesses, it was established that it did not do any transfer work at all; it is directly and solely a switching line, absolutely an industrial switching line. Yet they say, because it is a belt line, so-called, it has got to pay through freight rates under this proposal.

Mr. Trenholm described on the Minnesota Transfer on the one extreme, where the railroads assembling and distributing tracks of the different railroads are practically all a part of one

yard. They transfer from one railroad to another practically under the same conditions in the one yard. But they say the transfer service shall take a through freight rate.

Now, the other extreme pointed out, going to the other extreme of a considerable haul from one railroad to another railroad. Here in Chicago this transfer service where one railroad company assembles the cars that are to be delivered to another, may involve, does in a good many cases involve main line movement. And they have described the transfer service here in Chicago.

On the other hand, there is the other extreme of this transfer service, where it is practically switched from one transfer track practically of one yard, to another track in the same yard.

Now, the suggestion of Mr. Trenholm was that in some cases this so-called transfer service was more nearly comparable to yard service than it was to through freight service. In other cases it was more nearly comparable to through freight service. It could not be covered by this general definition so as to make a rate universally applicable without working injustice. And mind you, gentlemen, that injustice can only work one way, always have that in mind, it can only work in one way. Any award that you make these men can experiment with. There is nothing to lose.

But where they can apply it in such a way as to bring about an injustice, that can be applied in that way. There can be no injustice, no lessening of pay or compensation anywhere and we submit that upon this question of belt line and transfer, that that must be left to the adjustment of the peculiar local conditions. In other words, it cannot be treated as a matter susceptible of proper adjustment in a concerted movement applicable to the territory as a whole.

Now, we show here the difference in the service itself, the difference in the rates. At some points, a particular part will be paying the switching rate; and other parts, where the work is fairly comparable with through freight service, on other runs, they take the through freight rates; at others, where it is constantly intermingled, as in the case of the Terminal Association at St. Louis, they pay an intermediate rate.

The witness called on behalf of the employes, describing this service, Mr. Smith, an engineer of the Terminal Railway

Association, shows how the work of switching and of transferring from one to the other railroad company is constantly intermingled in the work of each individual in that line of work. Here we have the same situation with these switching lines in Chicago; the Baltimore & Ohio Chicago Terminal; the Chicago & Western Indiana; these purely terminal switching roads, part of the day in doing switching work and part of the day in doing transfer work; certain well understood transfer runs at times taking through freight rates; but in the Terminal Switching Association of St. Louis, an intermediate rate between transfer and switching spread over the service and payable to all employees. And that situation, we submit, cannot be adjusted by an award of general application, without working gross injustice, in some cases, at least.

Mr. Nagel: Now, the general tendency of these demands appears to me to be to make for subdivision of work and detailed classification of employment. That is the general tendency, detailed classification of employment.

Mr. Sheean: Yes.

Mr. Nagel: Now, here you have a case in which the attempt is made to concentrate employment under one head.

Mr. Sheean: Under one rate; not under one head.

Mr. Nagel: Under one rate. Well, I was coming to that. Presumably, through freight rates are intended for through freight work; that is the basis of the rate is it not? It is your contention that there is no analogy between through freight work and the work of helpers, pushers, men engaged in mine runs, wrecks, etc.

Mr. Sheean: No necessary analogy. In a particular case it may approach it closely.

Mr. Nagel: But no safe analogy?

Mr. Sheean: Yes, no necessary analogy that would follow in all cases, so that you could make it of universal application.

Mr. Nagel: Is there any analogy between these several kinds of work which it is here attempted to bring under the head of through freight rates?

Mr. Sheean: I would say not. There may be some analogy between mine runs and transfer service. I can see no possible analogy between pusher and helper service, and wreck service, for instance, or work train.

Mr. Nagel: And you are of the opinion that, with the adoption of this demand, it would have a tendency to disturb accepted definitions of this kind of work, and establish rules on the different systems of the roads.

Mr. Sheean: Yes, unquestionably, the adoption of this would bring service that is not fairly comparable with through freight service, nor are the different classes of service here enumerated fairly comparable with each other, all of them, to the basis of rates which are fixed because of the peculiarities of this other service, namely, the through freight service.

Mr. Nagel: In other words, every system probably has its own rules established by custom and understanding with the men, and you think we would create the same disturbance that is apt to result when you attempt to codify a well understood rule of action?

Mr. Sheean: Precisely that, and beyond the understanding of the men as to the particular situations, the fact that the service itself, because of the peculiarities of the situation and surroundings, and of local conditions, is not fairly comparable with a service that may have the same name in some other city on the same line, if you please, or on different lines.

Mr. Nagel: That is precisely what I wanted to get, whether the adoption of this demand might not result in more friction than we are trying to get rid of, by creating a desire to get within the rule, by a new interpretation of accepted terms on the different systems.

Mr. Sheean: I think there can be absolutely no question of that.

Mr. Nagel: That is your position?

Mr. Sheean: Yes, that is the position, and we refer in the brief to the part of the record in which Mr. Trenholm points out in detail practically the reasons as stated here.

Mr. Burgess: Mr. Sheean, if we found this condition to obtain, the same class of engine being used, the same distance for a pusher, and the same rules, but a difference of from \$10.00 to \$50.000 a month in the rate, why should that exist?

Mr. Sheean: It might be entirely due to the grade over which they operated, where you say a higher rate is permissible.

Mr. Burgess: I am speaking now of the same conditions,

the same grade, the same engine, the same distance, and the same per cent of grade.

Mr. Sheean: In that hypothetical case there should be no difference, if you can find any two that have all those things existing. But the point that I attempted to make was that the mountains are not built in a way to have those two identical conditions brought about in the pusher and helper service. They may be very nearly comparable, and if they are, I think you will find that the rate is probably very nearly the same upon the two lines.

Mr. Burgess: If it could be established that the grade was similar on the same system and the same series of mountains, we will say, only two different branches running over them, and crossing the same mountain?

Mr. Sheean: Yes, I do not think, Mr. Burgess, that there should be, on the railroad where they have just the same grades on different parts, and all the other surrounding conditions that make for hardship of operation, a difference in the pay over those two parts.

Mr. Burgess: Yes, but I did not go so far as you did. You said all the surrounding conditions. Now, that might mean many things and it might not mean anything, but I was not confining it—

Mr. Sheean: Well, I said in addition to the labor of engineers and firemen, of course, there is always the question involved of their skill and responsibility, and anything that has in times past and now should enter into consideration in determining a fair wage scale; anything in the surrounding conditions or of operation there that would make operating conditions over one division of this road just the same as over the other part, I do not see why there should be any difference in the rate of pay.

Mr. Burgess: Neither do you believe there should be any difference, if I understood you correctly, between railroad and railroad?

Mr. Sheean: Not if you can find precisely the same conditions, no.

Mr. Burgess: Well, of course, that qualification "precisely" may mean—

Mr. Sheean: By precisely, I mean precisely the respects

which enter into the fixing of the wage scale, the mileage and the time that it takes to make it, and all those other considerations that have always entered into it. I do not think there should be, at all.

Mr. Burgess: You put that word "precisely" in there. What I wanted to find out, Mr. Sheean, is this: it is pretty hard to find that absolutely straight-edged proposition, but it is the same engine and the same grade, and the same distance and the same hours; that is, ten hours will constitute a day; why should there be a difference of \$50.00 a month?

Mr. Sheean: You mean the ten hours constitute a day? Ten hours or less. I am trying to get a situation where they do actually get over it in the same number of hours in the operation, and their work while on the road is just the same, substantially the same; I am not hanging on the word precisely, but substantially the same; the wage should be substantially the same.

Mr. Burgess: That is all. Thank you.

Mr. Sheean: Now, that brings us to the part of Article 2, where it is proposed that on all divisions where the grade is 1.8 per cent or over, an increase of 10 per cent over valley rates will be paid.

Mr. Cadle called attention to the fact, or at least testified, that mountain roads generally have a differential of some kind. Our Exhibit 1 will show how these differentials vary, that is, how the situation has been considered and adjusted in the wage scale upon the different roads. Some roads will provide that in the mountains or over certain designated parts of the mountains, a shorter number of miles will be considered the equivalent of 100 miles in the valley. Others provide that between certain points designated in their schedules, there shall be a higher rate taken because of being in the mountains. And still others, I think the Canadian Pacific system, as I recall it, is that they designate in their schedule territory that shall be considered mountain territory, and the rest of it is valley territory, and then they provide in the schedule for mountain rates and valley rates.

Now, if this proposal was that all the differentials in the schedule should be wiped out, and in lieu thereof, wherever the grade was 1.8 per cent, 10 per cent differential would be paid,

there might be something to be presented to the Board. But Mr. Cadle very frankly stated that the saving clause here contemplated that all of the arbitrary mileage or excess mileage in mountain territory shall be retained, in addition to the application of this 10 per cent increase. That is, the men would retain the present mileage differentials and also provide a new rate differential; so that where mountain service has been allowed constructive miles, the saving clause would keep these constructive miles and apply the 10 per cent increase to them.

In other words, I submit that there has not been a single witness called on behalf of the employes who has described any mountain condition in which a proper allowance is not now made under existing schedules, because of the peculiarities or hardships of that particular run. Not a single witness has testified here pertaining to conditions anywhere on any of these systems in which a due and proper appreciation has not been given to any peculiarities that would justify a higher rate of pay because of the grade of the road.

Mr. Nagel: That would still leave room for a standardization of the allowance on all of the roads, would it not?

Mr. Sheean: This?

Mr. Nagel: I mean the condition which you describe. You say there is an allowance made wherever it should be made.

Mr. Sheean: Yes.

Mr. Nagel: But those allowances differ, do they not, on different roads?

Mr. Sheean: Yes.

Mr. Nagel: So that the request for standardization would still have some foundation?

Mr. Sheean: If they would say that this shall be in lieu of all present mountain differentials, oh, yes. If the Board makes an award by wiping out all present mountain differentials, that is the one case; of course, it would not be accepted as to all roads where they had anything higher; but where it might give them something better it would be grabbed up; but I do not think that standardization would be fair—now, I am speaking, and this is my first impression, and I want merely to give you my first impression. For instance, where you go up Marshall Pass, as described here, it may justify, as they probably get, quite a different differential from what would be allowed in pulling a

train out of St. Paul on a 1.8 per cent grade. In my judgment, there is no mathematical relationship between a given grade of a railroad, and a rate of pay. To climb the Rockies at one point, and to get over the Ozarks at another point, may present entirely different situations as to what the differentials should be. In other words, I do not think that it would be fair to the men or to the railroads that there should be an effort made to determine a mathematical relationship between mere grade and a rate of pay. What the differential should be ought to take into consideration all of the surrounding circumstances peculiar to the situation in which that allowance was made. It would have to be, in the end, in order to be fair to the men who operated over that particular division.

Now, of course, where it is shown that there is this great variety of conditions—I do not know how short Mr. Martin gets in his mileage there; 44 miles, is it not, in some places, in the mountains, where you get a certain mile post, as some one said, and then some other division being equivalent to 100 miles on an even shorter distance than that? But, mind you, what this thing means. They take this 44 miles of Mr. Martin's, and here we have got that in this mountain run, and that is equivalent to 100 miles, that is under our present schedule. Then, because it is in the mountains, we add on another 10 per cent under this proposal, because the grade is over 1.8 per cent. The length of the day is not disturbed by this at all. We have got our constructive miles and we have got our day fixed as 44 miles. That day is fixed, but because it is in the mountains, we get 10 per cent above what rate is paid in valley territory. In other words, they have adjusted, and I think the schedules, as analyzed in our Exhibit 1, will satisfy the Board thoroughly that they have adjusted them to meet the peculiarities of each of these situations. There has been no proof here that would justify the disturbing of those differentials, and the imposition of this Award could have only the one effect, of tending to pyramid and increase the compensation.

Now, there is no proof here as to 1.8 per cent bringing about any particular change in the work, labor and responsibility of firemen or engineers. In fact, it was developed in the testimony that practically every railroad, Mr. Trenholm said,

in this Western territory, at some place, had a grade of 1.8 per cent.

Now, the East and Southeast have no differential because of mountain territory. I do not know of any schedule that makes any differential or extra allowance. Do you gentlemen know whether there are or not? I do not know of any. Although they cross the Alleghenies, there is no difference at all made in any of the Eastern schedules. The grades on a great many of the roads are, of course, up to 1.8 per cent. This fixed arbitrary is practically a new suggestion, and we submit that there has been no proof, either on the question of any wrong being done anyone who actually operates in mountain territory, nor has there been proof of a change in labor and responsibilities at the particular breaking point of 1.8 per cent, nor has there been any showing on the general proposition that grade alone considered, a change in compensation should be brought about. In other words, there are a great many other elements that must always be considered in connection with the question of time on the road, in addition to the grade.

This D. & R. G. situation was illustrated by an example read into the record as to what this proposal would do to them, bringing about an increase of 174 per cent in the compensation of the engineer, and 189 per cent to the fireman.

That is also the combination of the narrow gauge and the 1.8 per cent, and he also gets the other thing because he is in the mountains and has a short day already fixed under his schedule; 44 miles are equivalent to a day, and then he is in the mountains and he takes 10 per cent above valley rates, and then because he is on a narrow-gauge locomotive he gets 5 per cent increase in pay. Under this proposal, that is the combined effect. I will come to that narrow gauge in just a moment.

That is the very next article of this proposal. The only man who testified about narrow-gauge service was Fireman Crylie on the Denver & Rio Grande, and they have increased the tonnage out there on this narrow gauge from 35 to 60 tons in the last year, and there has been an increase in their rates of pay, on April 1st, 1912. Now, that is simply on the Denver & Rio Grande from Summit to Cumbres, and Salida to Dennison. Salida to Dennison shows an increase in compensation of engineers and firemen of 84 per cent. That is the only nar-

row-gauge service that has been described here. It is in the mountains. Forty-four miles equivalent to 100, that is the basis of their day, 44 miles shall constitute a day. Ten per cent because it is more than 1.8 per cent, and the proposal here is that on roads where narrow-gauge locomotives are in service, 5 per cent increase over present rates shall be granted.

That is the only narrow-gauge service we have heard testified about here, although Exhibit 1 will show the narrow-gauge service that remains on some of the roads here in the West. Of course there is nothing here showing that this monthly rate paid, for instance, out on this Fennimore-Woodman run, where, on the Chicago & North Western, there is a man running narrow gauge who has a weight on drivers of 22,500 pounds, as shown by Exhibit 1, and he is on a monthly wage and has two cars a day, I think, that he has to handle, and runs over a distance of about sixteen miles. And there is more narrow-gauge service on the Chicago, Milwaukee & St. Paul, running over from Cascade to Bellevue, and that man has a long, hard through-freight journey of about eight miles, with two cars each day.

Of course the Southern Pacific has quite a large amount of narrow-gauge service, as shown in this Exhibit 1, practically in the mountains, so that it would all fall under this proposition.

In other words, my suggestion upon this part of the proposal is that they have wholly and absolutely failed, in any proof whatever, justifying any increase in this narrow-gauge service.

The Colorado & Southern is shown to have that service, and all the service on the different lines is shown in this part of our Exhibit 1, and we have there recited, or caused to be sent in by the roads, just what the service consists of, and the Board will find that this service on the different roads is being, fully, fairly and adequately compensated, I think, by an examination of what it is. And the only witness called on behalf of the employes in reference to this narrow-gauge service was Mr. Crylie, and he said that in 1912, April 1, 1912, there had been an increase to firemen from \$2.75 to \$3.70 in freight service, and from \$2.71 to \$2.95 in passenger service.

The next part of Article 2 deals with electric service. I was somewhat interested in Mr. Carter's oral argument that the

purpose of this Article 2 was to get control of the electric service of companies that might be organized, in which the stock was held or owned by one of the operating companies. Now, Mr. Trenholm stated very frankly that in the view of the Conference Committee it was only proper and right for a road having engineers and firemen, when they changed to electric or any other kind of power, to give their engineers and firemen the opportunity to qualify for that service. But that, inasmuch as the duties and responsibilities cannot be as exacting, the question of rules and rates, number of miles that shall constitute a day, must be left to the evolution of this experimental business.

Now in the Eastern Engineers' Case there was a request similar to the one here made, but the award was not as asked here that locomotive engineers and firemen shall have the right to the position of motorman and helper respectively, but that they shall have the preference. And in connection with the award the Board said:

"Since the use of electric locomotives of multiple unit trains upon steam railways is in so early a stage of development, and there is as yet no approximation to stable conditions, but a wide variation in existing practices, the Board found themselves unable, from the evidence before them, to make any uniform rules regulating rates of pay and conditions of service for engineers or motormen employed on such trains. The minimum day's wage of \$4.25 in passenger service is, however, awarded; but the day's work covered by the same, both as regards hours of service and mileage covered, is that which now exists in the electric service on the various roads, not that covered under the preceding heading 'Passenger Service.'

"This award is without prejudice to existing contracts for such service."

Now, it is shown by our Exhibit No. 1, at page 174, that in Eastern Territory, where electric service has been far more extensively developed than in the West, some railroads have a straight hourly rate, while on the Manhattan Division of the Pennsylvania Lines East, 118 miles in electric service is treated as the equivalent of 100 miles in steam service. On the Long Island Railroad, in electric service, 130 miles is treated as a minimum. And on the Rochester Division of the Erie, the minimum miles are 150.

Now the only proof that was offered here on behalf of the Employes, as to electric service, was the testimony of Mr. Finn using the electric motor through the tunnel at Tye on the Great Northern Railroad. He said that his earnings were about \$1,900 a year in that service, although they run as high as \$220 in some months. That is the only service described here on behalf of the employes. There is no suggestion here, no argument has been presented, as to any reason for changed rates or conditions in any actual service that now exists.

Mr. Hewitt, on behalf of the Railroad Companies, described the actual operations of the Southern Pacific, the single multiple unit trains operated in suburban service. He told about the taking over from steam to electric service, and the qualifying of the engineers in that service. They have there, however, in the passenger service, a ten hour day and a flat rate of five dollars, to the men in that service independent entirely of miles. No complaint from anyone in that service on the Southern Pacific, or showing of any reason why there should be any change in it, or why it should be put upon the mileage basis.

Now, we take the position here that Mr. Trenholm stated on behalf of the Railroad Companies. There is no good reason why engineers and firemen where a road actually changes from electricity to steam, should not give the preference to its engineers and firemen. But that is what the Eastern Award said, "preference," not "right." There should not be any closed shop about the proposition. There should not be any absolute giving to these men alone. They should have the preference to qualify for the service.

But the rates of pay, the number of miles that shall constitute a day in electric service, and what the rates and rules adapted to that service must be, or should properly be, must, as it seems to us, of necessity await the development and standardization, or the approach to uniformity which they refer to in the East.

And, therefore, it seems to us that the real purpose and object of this request, in view of the fact that they have submitted no testimony whatever on the rates of pay, or any change in rates of pay as they now exist, the real purpose of this request is simply and solely to get read into an award here the estima-

tion of the proposition not found in the East: Same rules, hours of service and mileage will apply.

Now, we most strenuously object, in view of the entire absence of proof, to this Board laying down any award whatever as to the rules, hours of service and mileage to apply, because the only electric service in the West, of any importance, as now described, actually has a different basis, namely, a flat rate, irrespective of mileage. Perfect satisfaction in that service. Not an employe from it testifying as to any change or request of change. In addition, Mr. Hewitt, describing that service, describing how readily the men accepted it, apparently how well satisfied they were with it, and no change from that situation justified by the proof.

Now I want to call your attention to the supplementary report in the East. I want to direct attention to the fact that even though the Eastern Award in that respect be followed, that there should be made a part of the award the supplementary award. The award in the East was as follows:

“Wherever electric service is installed as a substitute for steam, or is now in operation on any of the railroads parties to this arbitration, or any of the tracks operated or controlled by any of them as part of their system, the locomotive engineers shall have the preference for the positions of engineers or motormen on electric locomotives or multiple unit trains; but this right of the engineers shall not operate to displace any man operating electric power on any of the railroads, parties to the agreement on May 1, 1912.”

The Board, after the award was made, had a number of points submitted to them for determination, and among the points was the following:

“Electric service. The Engineers hold the award clearly intended to give the Engineers preference for the positions of engineers or motormen on the electric equipment on lines where electric service is installed as a substitute for steam or is now in operation on any of the railroads parties to the arbitration, or on any of the tracks operated or controlled by any of them as a part of their system. For example: The service between Stamford and New Canaan—here we have electric locomotives, multiple unit trains and single cars all intermingled. We cannot believe the award ever intended to allow the Engineer to man

the electric locomotives and multiple unit trains and allow some inexperienced motorman to man the single car sandwiched in between the other service.

“The Conference Committee of Managers holds that the first paragraph applies only to electric locomotives and multiple unit trains on those portions of the railroads where electric operation is substituted for steam operation, and operated as a part of the steam system by the steam company, and does not deprive the steam railroads of the contractual right to grant trackage rights to a foreign company, whether it be steam or electric.

“The Engineers hold that the New York, Westchester & Boston Railway comes under the award because it is a part of the New York, New Haven & Hartford R. R.

“What rate shall be paid for overtime in electric passenger service?”

And the interpretation given was as follows:

“In regard to the awards concerning electric service the Board make the following interpretations:

“In all cases where the railroads included in the arbitration operate as a part of the regular road service electric locomotives, multiple unit trains or other electric motive power, the locomotive engineers shall have preference for the positions of engineers or motormen and shall be entitled to the minimum rate awarded for passenger service, but this right of the engineers shall not operate to displace any men operating electric power on any of the railroads parties to the agreement on May 1, 1912.

“However, where trackage rights are leased to electric lines not parties to this Arbitration, the award does not in any way apply to the employees or said other lines.

“In answer to the question, ‘What rate shall be paid for overtime in electric passenger service?’ it is awarded that such overtime will be paid for at the rate of 50 cents per hour and will be computed on the minute basis; but this is subject to the award already made that said work in the electric service, both as regards hours of service and mileage covered, is that which now exists in the electric service on the various roads.

“This award is without prejudice to existing contracts for such service.

“The New York, Westchester & Boston Railway was not

a party to the arbitration; therefore the Board do not have authority to pass upon questions relating to this railway.”

I call your attention to that fact, because it is our suggestion that if the award here gives to engineers the preference to qualify for electric service, when and as it is installed as a substitute for steam, the award should make perfectly clear what is covered, not merely by the original award, but by the supplemental award in the East; that it shall not leave to the complications suggested here very frankly by Mr. Carter in his opening statement that purely electric service, street car service—some of these railroad companies have street car service in some of these cities—shall not fall within this arbitration. In fact, Mr. Shea, were you in that question of electric street car service with the Southern Pacific?

Mr. Shea: No.

Mr. Sheean: I thought some colloquy arose here about that. I do not know that it is a matter of record then, but there was some discussion as to what was street car service and what was suburban service on the Southern Pacific at Oakland, California, where the Southern Pacific actually operates the street cars, and the question arose as to whether or not the engineers did not have the right to take over the street car service of the city of Oakland. That went to arbitration, I believe, and they finally agreed on a segregation of what is street car service and what is to be considered a substitute for steam.

Mr. Nagel: Does the training of an engineer on a steam engine qualify him to take charge of this other service at once, or must he undergo a further training?

Mr. Sheean: He must undergo the qualifications described by Mr. Hewitt. The railroads, I think, practically take the position that they would rather have their engineers and firemen, if there is a substitution of the electric service for steam service, and their engineers desire to qualify for that service; and if there should be electric locomotives on which a second man is required, that their firemen should be given the first opportunity to qualify. Now as to how many miles shall constitute a day in that kind of service, and what shall be the equivalent of a day's compensation, is still in a state of evolution in the East, as to what rate is really applicable to that kind of service. All those questions must be left for the development of the business.

But the engineers and firemen who desire to go to that service should be given the first opportunity, should have the preference. As Mr. Hewitt described it, of course, their experience upon the road, their familiarity with the matter of signals, and the handling of trains, stopping and starting and so on, give them an advantage over other people in acquiring a knowledge with reference to the use of the electric locomotive.

Mr. Nagel: And gives the road the advantage of that same experience?

Mr. Sheean: Yes, and the men at the same time can qualify in a shorter period than an entirely inexperienced man would be able to qualify. But, of course, there is a training necessary that will qualify them for the use of the newer power.

Article 3 attempts, as has been attempted in at least one arbitration, to define a local train. The position of the railroads has always been that local or way freight trains differed so widely in make-up and character of service that it was impracticable to make a definition which would apply to all localities in such a vast territory. Everybody admits that these local or way freights ordinarily are so designated on the time card, and the men on the particular roads have no difficulty in knowing what a regularly assigned local train is.

It is rather an interesting fact that in the engineers' settlement under date of December 24, 1910, that was written up in the form of the various articles of the proposal, showing the articles in which presented, and then including the conclusion with reference to it before it was signed by the parties. Article 8 in that request was "that we endeavor to decide with the management what constitutes a local or way freight train."

But under date of December 24, 1910, article 8 was written into the agreement as follows:

"Withdrawn without prejudice, on the ground that it is a matter to be adjusted with the individual roads."

In other words, the engineers, on the 24th of December, 1910, took the position that it was a matter to be adjusted with the individual roads. In other words, the proposal was that they endeavor to decide with the management what constitutes a local or way freight train, and yet the agreement signed by all the parties was that it was withdrawn without prejudice,

and the ground of that withdrawal was "that it is a matter to be adjusted with the individual roads."

Now, the effort has been made on some roads to define a local or way freight. There is not any question about that; but if you will just look at the definitions on the different roads you will find that every one of them has found it necessary to take into consideration the peculiarities of the particular road in order to make that definition applicable even on that one road. You will remember that on the New York, New Haven & Hartford, after six or eight switches at certain points, providing they did not go to the slaughter house at some other point, would change a through freight into a local freight train; and the definition, even for a single road, has always taken into consideration the peculiarities of that particular railroad.

Now, Mr. Trenholm says that the men on the different railroads have no difficulty in distinguishing between what is a local and what is a through freight. The assigned locals are usually indicated on the time card. They are regularly assigned runs. Your Honors will find upon an examination of Exhibit 1 that practically all of these schedules contain particular provisions covering the intermediate work between stations, and where through freight trains are called upon to do this work, that is covered by specific schedule provisions of the different railroads, for the pay for this intermediate work in various manners upon different railroads. But the conversion of a through freight train into a local, or the defining of a local train by any hard and fast language, is shown by the exhibit as we think to be a practical impossibility. Taking the roads where definitions have been made, try and work uniformity out of those, and I think the Board will reach the conclusion that the impossible is attempted.

In the arbitration proceedings between the Eastern Firemen and the Railroad Companies, Article 2 of the Firemen's Request was as follows:

"Firemen on all freight runs that load or unload freight, and firemen on all freight runs that set out or pick up cars or do switching at four (4) or more points between their initial and final terminals will be considered as in local freight;" but by the unanimous award of the arbitrators no definition of local or way freight trains is given.

In the rulings of Dr. Neill which have been filed here with the Board, on certain questions or controversies that arose in the East following the award, is found the following:

"There is nothing whatever in the award or in the interpretations that could in any way be construed as determining specifically what should constitute either one of the above named services (transfer service and local freight service). On the contrary, the matter of fixing what constitutes these respective services is left to be determined by the respective roads and their firemen. In the original request prepared by the Firemen and submitted to arbitration, the Board of Arbitration was explicitly asked to fix the conditions that should distinguish local from through freight service. In its award the Board fixed minimum rates for 'local freight' service and provided that 'transfer' service should take the through freight rate; but it did not in any way indicate what should constitute local freight or transfer service. Controversies promptly arose as to what properly constituted each of these services respectively, and when the Board reconvened to pass on the matters in dispute, it was asked in the nine questions submitted by the firemen,

" '6. What constitutes transfer service?

" 'What constitutes local freight service?'

"In the interpretations handed down in answer to the questions submitted to it, the Board not only specifically declines to say what shall constitute transfer service or local freight service; but, in substance, says the matter is to be determined by the schedule rules on the various roads; and that where on any road there are no schedule rules governing what shall constitute these respective services, the representatives of the employes on such roads should take the matter up with the proper representative of the road and agree upon such rules."

Mr. Trenholm clearly described the development on a particular division of the railroad, if you please; how if work increased so that the local freight train was not able fully to do all the work of a particular part of the division, prior to the installation of a second or another local train a through freight train would gradually lose its character, getting nearer and nearer to that of way freight; and everybody knows what a through freight is as well as what a local freight is, but as to just where or how the dividing line should come would have to be

a matter of adjustment and determination in view of the peculiarities of the particular situation.

And it is submitted that that has been the conclusion reached not merely by the Arbitration Board in the East, but also by the engineers in the West, in their own position of withdrawing the request on the ground that it was a matter that should be adjusted with the roads severally.

Now, not only does this article attempt to give this definition of local and through freight, but it proposes that mixed trains which do any of this work shall be classified as local trains.

Mr. Cadle told us that the mixed train service is meant to cover the service of all kinds, that it hauls both freight and passenger, as well as handling the accommodation cars. Much of this service is on branch lines, where the mixed train does all the work there is on the branch to do, and ordinarily, as a general proposition, there is just this one crew on this branch that runs this mixed train. Again I ask, what proof was offered here by anybody in mixed train service that the present situation ought to be disturbed? The mixed train service is shown by our exhibit to be paid sometimes on a fixed monthly rate. There is just enough to do on some branches to justify the employment of this one crew. On some branches, the proposition to turn over to the train crew the gross receipts of the branch for their wages was scornfully refused by the employes on that particular branch; and, as Mr. Cadle says, ordinarily it is done by the one crew, which does all the work there is to do, and presumably and unquestionably they have a pretty hard time finding enough to occupy their time in doing it.

Some of them are on a monthly basis of pay. Take some of these three-mile branches that some witness and I got to talking about along the Burlington. There are half a dozen of them between Savanna and St. Paul, running back three or four miles, with one engine on the branch, and the men making three-mile round trips from the junction point to the main line. I guess the engine is bigger than the 22,000 pounds on drivers that they have up at Woodman; but one car, an accommodation car; and if they are fortunate enough to have an occasional car of freight, they take it down to the main line, or take a car of coal from the main line back to the other end of the terminal.

On some of these branches the service is performed for a

fixed monthly wage, as shown by our exhibit. Others are paid rates agreed upon for the branch line service. Some take a local freight; and we again submit that there has been nothing to show that the particular rate agreed upon to cover this mixed service, as shown in this Exhibit 1, is unfair at the particular place where it is installed. But here again they suggest the application of the straight edge, ten per cent more than the through freight rate to this mixed service. There is no proof in support of it. Why, the payrolls here show that the earnings on some of these branches for this mixed service are already among the highest earnings upon the railroad.

We submit, gentlemen, that they have simply asked here that this mixed service receive 10 per cent more than through freight service, but that no evidence whatever is offered in support of it; and when you come to analyze Exhibit No. 1, and ascertain that the mixed service here is practically all the service there is on these branches, and when you come to analyze the payroll exhibit and find that in this mixed service the men are among the very highest paid of any in the class of service, I think it should be a simple proposition to determine that there has been no showing whatever as to why the men on this little dinky engine, running up this three-mile branch, should get 10 per cent more than the men on the main line in through freight.

The present differential that exists is 25 cents. They ask a differential of 10 per cent between the local and through freight. In the Western Firemen's Case, the Award fixed a differential of 25 cents. Under date of December 24, 1910, the engineers agreed upon a differential of 25 cents. In the Eastern territory, in the Engineers' case, there was an award of 25 cents. In the Eastern Firemen's Arbitration there was an award of fifteen cents. So here you have three arbitrations, one in the West and two in the East, fixing a differential at 25 cents for firemen and engineers, and in the East fixing a differential of fifteen cents. The Award in the East fixed the differential for firemen at fifteen cents, and here in the West we agreed with the engineers upon 25 cents. Here is the situation now, that 25 cents is the differential established by three awards and one agreement. Now, whatever the difference was as between local and through freight service in 1910, or at the time of this agreement, we submit that there has been no change in conditions

shown here by which the spread should be greater now than it was at that time. There has been no showing here that the service has become more burdensome by comparison with the through freight service than it was in 1910.

Mr. Nagel: In those awards was there any attempt made to define local service?

Mr. Sheean: They declined to do that. They were asked to do it in the Eastern case, and the arbitrators declined to do it.

Mr. Nagel: If this definition were adopted, would you not at once be confronted with a further difficulty, to define what are way freight and mixed trains, engaged in the work here described.

Mr. Sheean: I do not think there is any question about that. The thing that they are attempting to define, of course, is better understood by the men on every line, and every railroad man understands those words better than the rest of the language that is used in the definition of local or way freight.

Mr. Nagel: That is precisely what I want to get at, whether the acceptance of this definition, or description, or whatever you may call it, will in any way cure what the demand has in mind.

Mr. Sheean: It will simply lead to absolute confusion. That is the position that we take. Everybody knows what local or way freight is. In other words, the uncertainty is not at all about what is a local train. There may be a fair difference of opinion as to the application of a particular cut of cars, of a freight train, as to whether that is a local train or should be properly classed as a through train, but it is not because of any uncertainty as to the definition of what a local train should be, or what a through freight train should be. The attempt to define a word which is already well understood would simply lead to complications, and the necessity of attempting to define the definition.

Mr. Burgess: What is a local train?

The Chairman: Can we defer this?

Mr. Burgess: Certainly.

The Chairman: Then we will suspend.

(Whereupon, at 12:30 o'clock P. M., a recess was taken until 2:30 P. M.)

AFTER RECESS.

Mr. Sheean: May it please the Board, just at adjourning time I was asked as to the position taken by the management as to what constituted a local train.

The Chairman: At the time we adjourned, Mr. Burgess was about to ask a question, and I told him he might ask it afterwards.

Mr. Sheean: Yes. I refer, Mr. Burgess, to page 5164 of the record.

Mr. Burgess: I have not it before me, Mr. Sheean.

Mr. Sheean: I will give it to you:

“Mr. Trenholm: Ordinarily, the naming of through trains and local trains is more for the purpose of designating the class of train itself than it is for any other purpose. I know of very few through trains. Both the local train and the so-called through train run between the same terminals, ordinarily. They go from one terminal to another. The duties of the local train, however, which designate it, I think, as a local train in years gone by, was the fact it is the train that takes the merchandise, less than carload stuff loaded in your merchandise houses in distributing centers, and takes it out and distributes it at the country stations. That labor, of unloading and loading en route, of course, is done by the conductor and his brakeman. The engineer and fireman have nothing to do with that.”

Mr. Trenholm, at page 5607, was asked by Mr. Stone:

“Mr. Stone: You say the local freight trains are very easily known, and everybody knows what a local is, the men and the officers both, but how are you going to get the local rate, if the officer will not apply it without a definition?”

“Mr. Trenholm: Well, I do not believe that the local committees have any serious trouble on those things. They might differ as to the extent to which one particular train was doing local work, and might have a disagreement; but I think as a rule, it is pretty well understood what a local or way freight train is, and what its duties are, and I do not believe there are many cases where the management and the committee would not agree.”

Mr. Burgess: Would you assume from that, that a local train was a train that unloaded package freight and did station switching?

Mr. Sheean: Those are among its duties, yes. I would infer from that, that Mr. Trenholm was attempting to develop the fact that a hard and fast definition using particular language in defining it, would raise the possibility of greater disputes and troubles about defining the words which were used in the definition than exist in the situation where you simply use the words local or way freight. That at the present time and in the present situation there are local passenger trains and through passenger trains, there are local freight trains and through freight trains, and that the words themselves are as simple in their designation as words can well be, and that the effort to define those simple words would simply lead to the possibility of greater disputes arising as to the meaning of the words made use of in just definition.

Mr. Burgess: Well, Mr. Sheean, leaving out the question of passenger trains, and taking the statements of Mr. Trenholm, it would be fair to assume that the train that loaded merchandise or unloaded merchandise en route, and did station switching, would be termed a local, would it not?

Mr. Sheean: The train which was specially designated for the purpose of starting from a point and doing all of the switching en route, and handling all of the local business?

Mr. Burgess: Yes, that would be a local train.

Mr. Sheean: A local train, created for the specific purpose of meeting the local needs of less than carload lots of the communities, and which did exclusively that work, was a local train.

Mr. Burgess: And if that train was unable to perform all the business, and another train was run to help it out and did the same work, that would be a local, too, would it not?

Mr. Sheean: If it did the same work, why, yes. If it started out from the terminal for the purpose of stopping at every station and doing all of the station switching, and unloading all of the merchandise, and covered the same route, it would be a local train. But if it started out as a through train and did the through work, and in addition thereto was called upon to do some intermediate work, then the schedules of all these roads practically make provision for the payment of that special service, in addition to the through freight rate. But that would not serve to make a through freight train a local. Be-

cause it did some switching would not convert it into a local train.

Mr. Burgess: But if a train started from Chicago, Mr. Sheean, and was named a through freight train, and on arrival at the first telegraph office, possibly five miles out, they received a message to do all the station switching between that point and the next terminal, would that in your opinion be a local train?

Mr. Sheean: I would have to know what the particular railroad was. What stops there were, what work they did.

Mr. Burgess: Well, we will assume that they had about 75 stations.

Mr. Sheean: Unquestionably a local train, if they stopped and switched at all of those stations.

Mr. Burgess: Well, not all of them. Some of them might not have any switching.

Mr. Sheean: Yes, but all of them where there was merchandise to unload or switching to do.

Mr. Burgess: That would be a local train in your opinion?

Mr. Sheean: Yes, I should say so. With 75 stops, doing the business of 75 stations would surely be making it a local train. I feel reasonably safe in saying that, without consulting my committee.

Mr. Burgess: You are qualifying it now. You are making another qualification now.

Mr. Sheean: No, with all the local business which there was to do in a district on which there were 75 stations would make it local. They might not have business to do at each one of them, but on a district which involved 75 local stations' work there might be on different days local switching to do and local merchandise to deliver, and on a particular day, with all of the local work that was to be done on that division, I should say unquestionably that was a local train.

The Chairman: Suppose we had a freight train running from here to Burlington, Iowa, that started out as a through freight, but owing to the different kinds of freight it became necessary to stop at say three or four stations to load and unload, set in and set out cars. Then what would you designate that train? Would it still retain the character of a through freight, or would it thereby partake of the nature of a local freight?

Mr. Sheean: I couldn't answer, Judge, by the naming of three stations or two stations or four stations.

The Chairman: Say six stations?

Mr. Sheean: I would not name it by any particular number of stations. It would depend entirely on what the work to be done at the different points was. I can conceive that even on that run from here to Burlington it might go to six stations, if it was to drop out a refrigerator car at one point, and a car of fruit at another, without converting it into a local train. I can well understand how even six stations might not measure it. And on the other hand, on the same run, another train going out and stopping at about two stations, or doing a lot of switching for some particular industry at that point, might be converted into a local train.

The Chairman: That is the kind of a train I had in mind. For instance, loading stock or unloading stock, or something of that kind. I didn't mean simply unloading beef or something of that kind.

Mr. Sheean: Yes. Therefore my proposition Mr. Chairman, was this, that I do not think that you can measure by merely taking the stations, or a certain number of stops. It is the work that is done. The distinction between the two situations, as I said, I believe to be well understood by the men upon any particular railroad as to what will convert a through freight into a local. The number of stops may not be the important feature. It is the work that is done in connection with it.

Practically all of the schedules here provide for men being compensated who are in through freight service for the work which they do en route. Practically every schedule makes some provision to cover that situation. Whether a certain number of stops converts the character of the train from a through into a way freight, must depend on what they do on the separate trips at different times. If that degenerates into a habit, if the work upon a particular district is such that work ordinarily understood by every one to be local service is regularly done, they have the right, for the train which does that, to take the local rate of pay.

The Chairman: Do you think any words could be employed that would properly characterize a train of that kind?

Mr. Sheean: I am very glad to have the opportunity to

call your attention to the efforts which have been made in trying to define it, even for a particular road.

The Chairman: I think I will limit you to the Western territory, and not let you go into the East.

Mr. Sheean: All right, we will take the West.

The Chairman: I do not want to tackle that Eastern rule that you had the other day.

Mr. Nagel: That had reference simply to the Boston & Maine.

The Chairman: Yes.

Mr. Sheean: I would like your Honor to see some of the definitions in the East.

The Chairman: I was just joking about that. Give as many as you want to.

Mr. Sheean: I would like your Honor to see some of the examples, to see what they have tried to do. Let us take the Southeast.

Norfolk & Western:

“When through freight trains consume more than one hour and one minute in picking up or dropping cars between terminals, they will be paid local rates. This does not apply to freight trains between Vivian and Williamson, or picking up or dropping cars at Chattaroy, Naugatuck, North Carolina Branch, Price, Front Royal, Greenville, Finney, junction points, setting off disabled cars or picking up or setting off live stock or perishable freight.”

There is one definition, applicable to one railroad, in which they seem to have to make exceptions which are designated.

Florida East Coast:

“Local freight work shall consist of handling and spotting empties or loads, loading and unloading freight. Through freight trains that pick up or set off at four points or more between terminals will be paid at local freight rates. This does not apply to picking up cars loaded with perishable freight.”

The Atlantic Coast Line has attempted a definition:

“Through freight trains that pick up or set off cars at four points or more between terminals will be paid at local freight rates. This does not apply to picking up cars loaded with perishable freight, but does apply to melon trains. When an engineer in through freight service is required to stop at any one

station between terminals in excess of one hour for the purpose of switching, he will be paid local freight rates.

"Engineers will not be required to classify their trains between terminals, except in cases of emergency, and in such cases will be paid the local freight rate. This does not refer to picking up and setting off cars en route."

Mr. Burgess: Would you mind reading the Union Pacific, the Northern Pacific, and the Missouri Pacific?

Mr. Sheean: Mr. Stone read a part of that on direct, and I want to read all of the Union Pacific.

Mr. Stone: Mr. Stone read all of it on direct, begging your pardon.

Mr. Sheean: Union Pacific.

"Section 1. Trains loading or unloading way-freight or doing station switching are way-freight trains.

"Local work will be confined to local trains as far as possible.

"Section 3. Engineers on local or way-freight trains, other than trains specified in Section 2, will be paid 25 cents per 100 miles or less, ten hours or less, over through freight rates on same class of locomotives. Overtime pro rata.

"This does not apply to through or irregular freight trains setting out or picking up cars at stations or picking up or dropping tonnage en route, or loading or unloading small lots of perishable freight."

This latter part of Section 3 was what I thought Mr. Stone did not read. What was the other one, Mr. Burgess?

Mr. Burgess: The Northern Pacific and the Missouri Pacific.

Mr. Sheean: Northern Pacific.

"Rule 54 (a). Local freights are trains whose work is the loading or unloading of freight or doing station switching en route; engineers of such trains will be paid ten (10) per cent increase over regular rates. This rule does not apply to engineers of through freight crews setting out or picking up cars at stations, or the loading or unloading of freight at not more than two points en route.

"(b) Engineers of log trains (except straight-away log runs handled in through freight service), coal trains to and from mines, and switch runs will be paid at local freight rate.

“(c) When one train is operated westbound between Lake Park and East Grand Forks via Crookston, it will be classed and paid as local.

“Note.—Local or way-freight is understood to mean the service that goes over the district handling the usual way-freight and local switching service—what is commonly termed the ‘local’—carrying ‘peddler’ cars, loading and unloading way-freight and doing station switching.”

So that after defining it they have a note here saying that a local train means a local or a way-freight train.

Missouri Pacific:

“Article 9. An allowance of one hour at through freight rates will be made to engineers of through freight trains loading or unloading L. C. L. freight. When more than one hour is used in doing such work, local freight rates will be paid for the trip.

“Article 29. (a) Engineers in through and irregular freight service consuming two hours or more picking up or setting out cars or doing other switching between the terminals of their runs, will be paid local freight rates for such trips. The only time to be counted under this article is that necessarily required in doing the work.

“(b) On runs where engineers are allowed time, independently of road overtime, for making up or putting away trains or switching, the time so allowed will not be used to make up the two hours stipulated herein.

“(c) This article will not apply to a run of less than 50 miles for which 100 miles is allowed, when made in 5 hours or less, exclusive of any terminal time paid for on such runs.

“(d) This article to apply on the following lines or districts only.”

Then it names the St. Louis to Pueblo, Omaha to Alexandria, and a long list to which only it applies.

Mr. Burgess: Mr. Sheean, let us see if we understand one another correctly. If I understood you properly, you stated that if it was necessary to run, or at least that was the intent of my question, it might be possible they would have to run two sections of the local train, and in that case you thought each section would take the local rate.

Mr. Sheean: Yes.

Mr. Burgess: And then there was another question involved, that is, of converting the through train into a local as far as the pay was concerned, but in that event it would probably only stop at a few stations en route, and that is the particular point that you object to paying the local rate for, is that right?

Mr. Sheean: I beg your pardon, Mr. Burgess. I read as following rule 54 of the Northern Pacific, the word "note" which comes immediately under here, but the word "note" is opposite Oregon-Washington Railroad & Navigation Company. The note, I thought, was a part of the preceding schedule.

Mr. Stone: So there is no definition?

Mr. Sheean: Yes, they define it at the start, but they say "this rule does not apply to engineers of through freight crews setting out and picking up cars at stations, or the loading or unloading of freight at more than two points en route."

Now, I beg your pardon, Mr. Burgess.

Mr. Burgess: My idea was to get light on the subject, Mr. Sheean, to get it correctly. If I understood you correctly, if they run two sections of the local train, in your opinion, both those trains should take the local rate. Is that right?

Mr. Sheean: Yes.

Mr. Burgess: And there is another question, that a through freight train might be required to stop at one, two, three, four or more stations, but that is the particular train that you object to having the local rate. Is that right?

Mr. Sheean: Yes, and that situation, I think, Mr. Burgess, is ordinarily covered in most of the schedules, for the switching en route. Non-incidental work, I think it is the way it is usually covered.

I called attention just before the noon adjournment to the fact that the 25 cent differential between the two classes now exists by virtue of three arbitrations; that in the Eastern Engineers' Arbitration a differential of 25 cents was established, in the Eastern Firemen's case a differential of 15 cents, and in the Western Firemen's Case a differential of 25 cents was given the firemen, and a differential of 25 cents in favor of the engineers, by the agreement of December 24, 1910.

I desire to direct attention particularly to the fact shown at page 50 of our brief, that both in the award in the West and

also in the agreement with the engineers in the West, where this differential was created, that there was excepted from the provision of the award roads having an eight hour day or twelve and a half miles per hour basis for such runs. That both by agreement of the engineers and by the award of the arbitrators as to the firemen, that where ten hours was not given as the equivalent of the day, the claim practically being as the basis of the differential that the men always worked in hours, got their pay in hours, and where by virtue of the provision as to computation of overtime being on the basis of $12\frac{1}{2}$ miles an hour, that they were excepted from the advance or differential which was created in the West at the time that this differential was established.

Now, of course, as I argued this morning, whatever there is in the difference of the work as between local and through trains, it hardly can be argued that there is, as between the local and through service in the West, a greater spread or greater difference or greater distinction than there is in the East or in the South; nor has there been any proof here made, that the local service in the last three years has undergone a change whereby its relationship to the through freight service has been brought about. So that we submit that there is, in this Western territory, now established uniformly as to all the roads, a differential of 25 cents, which is the differential established by arbitration in the East, and also fixed here by arbitration in 1910.

Mr. Nagel: Is not the real contention that, under the interpretation adopted, the men do not get the benefit of that differential?

Mr. Sheean: There has been no proof offered of it. I note again in the brief as to what they may do.

Mr. Nagel: I thought perhaps this attempt at a definition was intended to make clear to what kind of work the differential is to apply.

Mr. Sheean: That may be, but if so, the Board is left without any proof of it. I note again in the printed brief filed here, as to what railroads might do, the necessity of a local and comprehensive definition: "To avoid the higher rates of pay per mile paid to engineers and firemen in local freight service, such trains may often be abandoned and through engineers and

firemen required to perform local freight work for the lower rates of wages." Now, I have heard no evidence here in this record of any railroad company having done that since 1910. They say: "Or to avoid tying up of local freight trains in the application of the Federal Hours of Service Law, it is not unusual to assign much of the work of local freight trains to through freight trains."

I have heard no evidence of that on any railroad. "Thus reducing expense of operation to the railroads and increasing the labors and hours on duty of the engineers and firemen in through freight service, without the local freight compensation. When this work is required of engineers and firemen in through freight service, additional compensation should be paid."

Now I submit it cannot rest upon mere conjecture that railroad companies may abuse their men. If there is, in fact—and I asked here that we be given some statement of any case in which the men had not received the differential that was established as between local and through, and a search of the record fails to disclose any witness describing operations on any railroad in Western Territory where he, the witness, thought he ought to have the local rate and where it was not paid to him.

Mr. Nagel: Well, you will not be surprised if I do not bear all the testimony in my mind, Mr. Sheean.

Mr. Sheean: No.

Mr. Nagel: Nor would I like to discriminate between testimony and statements at all times; they are crossed a good deal; but I thought that I had heard the statements from time to time, either with reference to this subject or others, that there was difficulty in getting the benefit of rules that had been adopted. I have heard that said, and I did not know but what it might have been in mind when this demand was suggested.

Mr. Carter: Pardon me, but I might throw a little light on this subject. When the firemen and hostlers received the wage advance in 1910 by arbitration, there was a differential fixed for local freight trains. On the Colorado & Southern Railroad they had no local freight trains in their schedule, and declined to pay anything for local freight. The fact that Mr. Frank Ward, a most estimable gentleman, was a member of

the Managers Committee, led me to recommend to our men on the Colorado & Southern an appeal to Mr. Frank Ward, who was the General Manager of the C., B. & Q. Railroad. Mr. Ward, while claiming not to have any jurisdiction over the Colorado & Southern, did use his good offices, and finally induced the officials of the Colorado & Southern to designate some trains as local trains. It was that to which I specially referred.

Mr. Sheean: Well, that is over the dam isn't it? That is back of 1910. Where there is such a request here, and I find it again reiterated in the brief that maybe they will do this and maybe they will do that.

Mr. Nagel: Well, that would rather tend to show why no evidence was introduced.

Mr. Sheean: I think so, yes. But I want to say, too, Mr. Nagel, in reply to your suggestion that you could not be held responsible for all the evidence, I also do not want to be held. If I do misstate anything about the evidence here, I would be very glad to have my attention directed to it at the time.

We have attempted, topically, to index all of the evidence in the case under the appropriate head, under every one of the articles in the proposal, and I fail to find from such indexing that any witness upon behalf of the employes has testified that upon any railroad at the present time, there is any misunderstanding between the men of that railroad and the management, or has ever been any misunderstanding between the railroad management and the men of the railroad as to what constituted a local freight, since the differential was established. And I make that statement relying upon our topical index. If there be such evidence, I don't know of its being in the record. Ceasing the reason, the necessity for a rule also ceases.

Which brings us to Article 4. Proposal. Switching service.

Mr. Carter testified that there is a close approach of uniformity in the rates paid for yard service in the different parts of the West. Now, our Exhibit No. 1, pages 188-189, shows not only that this close approach to uniformity exists in the West, but that in fact it is quite general throughout the entire United States, except that the firemen, both white and colored, in the Southeastern territory, are not paid as high in switching service

as the rate awarded in the East, or as now paid in the West. That is, the rate that is requested here is \$4.75 and the rate that was awarded in the East is \$4.10, and the rate that we are paying in first class yards is \$4.25. \$4.25 is also the rate paid in the Southeast very largely. And, in the Eastern Firemen's case, the Award fixed the rate of \$2.50 to firemen, while here the request is \$3.10. \$2.50 on the less than 140,000 pounds on drivers, and \$2.60 on engines weighing 140,000 pounds or more on drivers.

Now, these rates thus established by the Award in the East, less than the rates now actually paid, we submit show that there is no cause for any change in fixing the switching rates as now established in Western territory.

It is proposed in the second part of Article 4 that a differential be established as between night and day yard switching. Mr. Cadle very frankly admitted that there was no such differential, on any railroad anywhere in the United States in favor of night engineers or firemen. No railroad at the present time has any distinction as to engineers and firemen, between night and day service.

Now, while some employes testified generally to the fact that switch engineers and firemen preferred day to night service, and stated that it is more difficult to get the signals of the switchmen at night, and more dangerous, because impossible to see whether the cars are in the clear, yet in the end no fact was recited with reference to the night work of a yardman that put that on any different category than the night work of roadmen being not as advantageous or desirable as the day work, or the daylight runs of engineers and firemen.

It would seem that in the end this suggestion of a night differential is predicated upon the fact that for many, many years there has been established a night differential in favor of the yard switchmen. Mr. Trenholm testified that that went clear back to the days of the link and pin coupler, when the switchmen upon the ground, of course, doing the coupling, going between the ends of the cars, handling the link and pin, encountered hazards and dangers that the day men in doing yard switching did not encounter, and how even with the substitution of the automatic coupler, which to an extent at least, has obviated the necessity of men going between the ends of

the cars, yet in the adjusting of the knuckles, the raising of the lever, the walking around in the yards at night, the possibility of stumbling over any obstructions, the climbing on and off of cars while in motion, justified a differential in favor of night switchmen, and that differential has been continued from the old days of the link and pin, when it was first established, down to the present time.

But it was also shown that under the present practice some men select the night yard work during the summer months, the hot months, preferring it at that time to day work. And the further fact was brought out that the young fireman usually gets his first experience in a night switch yard, from which he graduates to road work, and as he gets older passes along to the grade of engineer. On some roads, of course, the rates in the yard are not interchangeable with the road rates, but on a great number of other roads they are. But the service, as Mr. Trenholm testified, was not unlike the experience of a telegraph operator whose first experience usually is gotten at a night office, and gradually, as a more desirable place was offered, getting into day work.

Now this, as I stated, is something that does not exist, and has never existed in any schedule, and is only the starting point of the establishment of a differential between night yard work, that if carried to its logical conclusion would justify and require the payment of the road engineer and road fireman, who in the darkness of the night were to go out on the road carrying the train, picking up the signals at night, the same lack of ability to see as clearly and as well as in the daytime, that underlies the suggestion for any change, or the establishment of any differential in favor of the night service.

Furthermore, on this spread of hours is pointed out a differential—it is not in fact absolutely the night differential, although the fixing of the hours is designed and intended in the end to bring about a differential in favor of night service as performed by the engineer and fireman.

The latter part of this same Article 4 proposes to place the yard service on the basis of time and one-half for overtime. It also proposes to do away with the meal hour. That is, it was pointed out by Mr. Trenholm that at the present time on nearly all of the roads, except at the extremely busy and congested

points, it was the custom and practice to give one full hour to the switch engineer and switch firemen, at a regular and designated time. That is, the schedules of the road provide for a ten-hour day in switching service. That ten-hour day, as it exists at the present time, is the man going to work at 7 o'clock in the morning and working until 12, released promptly at 12 until 1, resuming work at 1 o'clock and working until 6, has completed a ten-hour day. Under the schedules of the roads, if his designated meal hour was exceeded so that they required him to work during any part of the designated meal hour, he would be given thirty minutes for his lunch, but paid for the full hour. That is, at the present time, and in the present situation, there is an inducement to all railroad companies to try and afford to all men in switching service one full hour for the meal at a designated time. That situation is shown by Exhibit 1 to be in practically every schedule. Mr. Trenholm testified that it was done in the majority of cases at practically all of the smaller terminal points where there were a small number of switch engines, and the business could be arranged and was arranged so that in just this situation the man after working the five hours would have one full hour for his meal, and get it with as great regularity, practically, as was given to a school teacher. After one full hour off he goes back and works five hours more. That is the ten-hour day.

But this proposal says the ten hours to be counted continuously, with a half hour off for a meal. It covers it into absolutely nine and one-half hours possible working time, with a full ten-hour payment. And it is contrary to the claim of trying to improve conditions, and does away with the inducement of giving the man the warm meal, and removes any inducement or incentive of doing so, and substitutes for it the payment of full time.

Now, we submit that this rule is absolutely bad in principle. It is absolutely wrong in principle. The practice has not been disputed, as testified to by Mr. Trenholm, that at these smaller yards, the men are actually given this one full hour at the present time. There is under the present practice, in all the schedules inducement, an invitation to the railroad companies to try and give them that hour, because if they do give them the one full hour within the designated time, then that is not counted in computing their time. But if they do not succeed in giving them

within the designated meal hour the hour for their meal, then they pay the penalty of having to give them one-half hour for the meal, and paying them for the full hour.

Now, a rule as thus framed is framed upon the right principle, and there is no disposition on the part of any witness for the railroads to attribute to the men any different motive or inducement in presenting the proposal than that which animates all humanity. But when they talk about the incentive to give the men the full meal hour, under the old practice there is that incentive. But under this proposal there will not be that incentive. So I say that any change in this rule would cause a removal of incentive in railroad yardmasters to provide the one full hour for the meal. It is a proper practice. As found in the schedule at the present time, the meal hour is designated within certain limits, and gives one full hour within that time, in order that he may have the warm meal. If you do so, that hour that we are thus completely relieved of all responsibility shall not count in the computation of our working time. But if, through the exigencies of the service you are required at any time to exceed that designated meal hour, then you will pay us the full hour and give us the thirty minutes for the meal. That, I say, is the proper principle. That is the principle that ought not to be disturbed. That is the principle that is now in the schedules.

Under that practice, according to the testimony of Mr. Trenholm, it results actually in these men at the outlying points being permitted to get their one full hour for their meals. The substitution of this rule would prevent that. Not only that. Practically every schedule as to meal hours in switching service has a schedule not merely as to engineers and firemen, but as to the organization which represents the conductors and switchmen, or the foreman and switching crews. The same meal hour is designated in these schedules, covering the same points, between 11:30 and 1:30, between 12 and 1:30, between 12 and 2, meeting the situation at different points. Those schedules are in existence with regard to the yard men. Why, the yardman says, "This engine comes back here at 12 o'clock every day. I am going home and have my meal. My schedule entitles me to it, to one full hour for a meal." He is entitled to have it. The engine is tied up. It is proposed here that not-

withstanding that the engine is tied up, that the engineer and fireman go on continuous time. You cannot use your engine, because the rest of the crew, under their schedules, are entitled to their full hour off. But the engineer's and fireman's time goes on, and if they do work the actual ten hours that the schedule of the switchmen and yardmen provide for, five hours, one hour out, another five hours, why not only will the engineer and fireman be under pay during this length of time, but the ten hours' work in that way will put the latter part of it under penalty time of time and one-half, if this suggestion was carried out.

Now, I do not care again to take up the matter of punitive overtime, because I quoted yesterday at length the conclusion reached in the only two cases in which in transportation service it has been under arbitration. It has been passed upon specifically by the Illinois State Board, and also by the Honorable Seth Low and Dr. John H. Finley, in the recent Trainmen's case. In both cases, the question of yard service was involved—in the Illinois case specifically, and only the case of yard service, or yard service and transfer service was involved—while in the Eastern case transportation road service as well as yard service was involved, and both questions discussed and passed upon. The statement was made in both of those decisions, and I said yesterday that an examination of the schedule submitted here led us to the same conclusion, that in no trade or industry, in no situation, is the punitive feature of overtime provided for in the schedule save and except where it is optional with the employer whether he will or will not elect to pay overtime each time that he incurs it.

That is the underlying principle, so stated by Dr. Finley and Mr. Low, so found to be the fact as to every schedule in which it exists; and how impossible and how impracticable it is actually to control, and to say from day to day, "I elect here and now to incur overtime; I have made my arrangements, and at this particular time I am going to incur punitive or penalty overtime," is most graphically described by the witnesses here. And when you come to consider that in these earnings of engineers in yard service, concerning whom they commented—the Milwaukee engineers—why, here is one man working fourteen hours and here is another one working fourteen hours in the

yard, although he has a ten hour day; but you find when you put the same men in the same yard side by side, the railroad company was paying the men fourteen hours, but one of them was waiting for the engine, drawing pay because he was waiting, and the other man drawing pay because he was not able to get his engine back from switching at the industry. That is the situation under the ten hour day.

We heard a lot of talk about the New Haven, three shifts of eight hours each. What do they pay? Do these gentlemen want to get upon the eight hour day of the New Haven? Why, the schedule shows. The engineers on the New York, New Haven & Hartford get \$4.10 for a ten hour day; but in the yards where they have three shifts of eight hours each, the engineer is paid \$3.50 for his eight hour shift, and the fireman on that road for a ten hour shift gets \$2.50 for a ten hour day. Part of their yards are on a ten hour day. Others of their yards on the New Haven have an eight hour day, and the firemen there get \$2 for the eight hour day. In other words, where they have on the same line of railroad certain ten hour yards and certain eight hour yards, they are paying them on an hourly basis.

Again as to this overtime, the latter part of Article 1 provides that the additional pay to through freight men for this work, such as loading or unloading freight, stock, or company material, switching at stations, etc., shall be paid for at overtime rates in addition to time or mileage made on the trip. In other words, we have again interjected, on this conversion of through into local trains, the suggestion that even though a particular train has not been converted into a local train, nevertheless, any through freight train stopping for the purpose of setting out a car of meat or perishable fruit, or anything of that sort, to serve the needs of the community, shall be done at punitive time and penalty rule. The justification for overtime is always penalty, penalty! punishment for an improper practice.

Mr. Trenholm described here how the needs of these little communities could only be served and were served at the present time by starting out from a jobbing center, such as St. Paul, a through train, and when half way over that division dropping off a car there, and two-thirds of the way over the division dropping off another car, so that the local freight trains in the other direction can pick up those cars that are to be distributed at

the intermediate points to take care of the needs of the community. That does not convert a through freight train, as always understood, into a local train—the setting out of cars in that manner. And yet they say, “Why, we want to stop that practice;” because the penalty rule can find justification only in the argument that it is something that ought to be cured, that ought to be done away with. Therefore, they say bluntly, that whenever a through freight train is called upon to do such work as loading or unloading freight, stock or company material, switching at stations, etc., they shall be paid for same at overtime rates in addition to the time or the mileage made on the trip.

In other words, one of these fast or “red ball” trains that we have heard described here may run over 120 miles in five or six or seven hours; already paying the man for the 120 miles, or one and two-tenths days for the five or six hours’ work, if he is asked to drop one of his cars, to set out a car somewhere to serve the needs of a community, in addition to all the miles of the trip, although made in less than what was agreed upon as fairly representing a day’s work, in addition to the mileage of the trip, to be paid for this other work at penalty rates.

That, I think, is all I care to say upon this question of punitive overtime, because it has all been said and better said by the arbitrators who have passed upon the question in the only cases in which it has been submitted in transportation service.

But article 4 then says:

“When road engines are used in yard service, road rates will apply.”

Gentlemen, in this whole situation about the pyramiding of schedules and of rules and of service conditions, I think I have never seen a better illustration of how these things are handled in the matter of securing, first, either a rate and then later the elimination of the practice on which that increased rate was granted, or the procuring by an alleged service rule or condition rule the elimination of some practice, and then afterward pyramiding the rate upon that, than is presented here.

In presenting the case in the East so as to bring up the switching rates of pay, and fixing the switching rates of pay, Mr. Stone in his printed brief, as one of the reasons why the

switching rate should be made a high rate, should be brought up nearer the road rate—it had been much below it before that time—said—

“Many of the roads do not buy or build engines for switching service, but take road engines for the service. Many of these engines are in such bad shape they are no longer fit for road service, so they are placed in the yard to get a little more service out of them before being placed in the shop for general overhauling.”

In other words, this is shown to be the practice in the West. Mr. Trenholm says very frankly, why, yes, an engine now no longer fitted for the arduous, strenuous duties of the road, is converted into a switch engine, or put into the yard. Why, they used to get only a very small rate of pay in the yard, much below the road rate, but gradually they have been putting road engines into the switching service, so they got this rate established now in yard service, up nearer the road rate because of that practice; and then, having that rate established by showing that that is inherent in the very nature of the business, having gotten the high rate in that way, then they propose a rule to stop the practice on which that increased rate was obtained. So, here in the West, having gotten the rate based upon that, they say that when a road engine is used in yard service, road rates will apply.

We submit that no reason has been shown to justify it. Everybody admits that it is the practice to convert road engines into yard engines, to equip them with footboards and front and rear headlights, and make yard engines out of them. But Mr. Cadle says, “Once a road engine always a road engine, no matter what you do to it.” Yes, as he put it in his own language, “The way that rule is written, I don’t see you can interpret it in any other way than that road rates would apply to all converted engines, whether temporary, permanent or otherwise.”

And then, too, that was cleared up perfectly by the question which was propounded as to just what they meant by this proposal. During the negotiations they submitted the question in writing:

“It is the present practice on a number of lines to use engines assigned to road service temporarily in switching service, pending taking them into shops for repairs. Such engines are fitted with front and rear headlights and footboards. Under

such conditions will this clause above quoted apply?"

To the foregoing question the reply made by the committee which represented the men was "Yes."

Now we submit, if the Board please, that there has been no reason advanced here why the yard rates as they are established at the present time, higher as a matter of fact than the yard rates established by the Eastern Award, should be increased, or why there should be any change in the practice established here and existing at the present time. Four dollars and twenty-five cents is the going rate, and practically, as Mr. Carter testified, it is the rate universal throughout this territory.

There are many reasons against the proposal to do away with the meal hour as established in these schedules, substituting for it the wiping out of all possibility of actually furnishing a free, full hour for meals to the men, and substituting for it a mere payment of money, but with a loss of any inducement or incentive, or any real opportunity to provide the time whereby men could get their meals, as it was testified they are doing under the present practice.

I have treated articles 5 and 6 together in the brief, for the reason that in both the Engineers' and Firemen's Eastern Arbitrations, the request for preparatory time and initial and terminal delay were recognized as being interrelated subjects and as being disposed of by one section of the award, in both cases.

There never has been, in transportation service, any recognition of the fact that engineers and firemen have certain separately defined duties, that a part of their work is limited and determined by what they do at one point, another part by what they do at another point, and still another by some further arbitrary division, for purposes of compensation.

The Committee here representing the Railroads conceded in their negotiations with the men that it was a proper practice that, in computing compensation on the basis of the standard 10-hour day, when the basis of the pay is in hours, the compensated time should begin when the men are required for duty, and should continue until they are finally released; but they have never given recognition to the suggestion that the engine-men's working time can be segregated into a portion that is necessary to do this, or the arbitrary segregation of road time

from yard time; nor have they conceded at any time that any method of payment which divides the working time of engineers and firemen into different periods, although their service has been continuous and uninterrupted, is sound or equitable.

It is and always has been a part of the employment of the engineer and fireman to take the engine from the roundhouse to the depot or the yard, and from the depot or yard to the roundhouse, at the beginning or ending of their run, and rates and rules have generally been adapted to this practice and payments have been made accordingly.

You will recall, perhaps, that early in the proceedings Engineer Young of the Union Pacific was asked about the way in which increases have grown up or wage scales were built up, and he said very frankly that during all the time he had worked on the Union Pacific, which was a great many years, this preparatory work that he described, or preparatory duties, have been incident to the engineer's work; that it is a part of the engineer's business to make a preparatory inspection and to know that he has the proper equipment for the trip; that the engineer does not do the physical work of putting the supplies on, but is responsible for knowing that they are there; and that, in fixing rates that have been made, Mr. Young said, during all the years he has been employed by the Union Pacific, the rates have always included work from the time the man went to work until he got through.

In other words, fixing the rate of pay per mile, per 100 miles, per day of ten hours, as described by the various witnesses here, has always taken into consideration the fact that there was done by the engineer and the fireman the work that he is doing today. His work has never ended when he got to the outer switch, or to the roundhouse, and rates were built up accordingly and have been built up accordingly.

Now, the requests for preparatory time and also for initial and final terminal delay were contained in the propositions decided in both the Eastern Arbitrations. They asked for an arbitrary preparatory, and initial terminal delay and final terminal delay in both Eastern cases. And, at page 62 of the brief, I call attention to the Award as made in the Eastern case on these two propositions. Because, as stated, both the preparatory time and

initial terminal delay were treated as inter-related, by both Boards of Arbitration.

The Award was as follows:

“Beginning and Ending of a Day.”

“In all classes of road service, an engineer’s time will commence at the time he is required to report for duty, and will conclude at the time the engine is placed on the designated track or relieved by hostler at terminal.”

“Initial terminal delay.”

“Compensation for Initial Terminal Delay is not allowed beyond that involved in the rule, that pay shall begin in all cases at the time an engineer is required to report for duty.”

“Final Terminal Delay.”

“For freight service, final terminal delay shall be computed from the time the engine reaches designated main track switch connection with the yard track.

“For passenger service, final terminal delay shall be computed from the time train reaches terminal station.

“Final terminal delay, after the lapse of one hour, will be paid for at the end of the trip, at the overtime rate, according to class of engine, on the minute basis.

“If road overtime has commenced, terminal overtime shall not apply, and road overtime will be paid to point of final relief.”

And in the explanation accompanying the Award, filed as a part of it, the Board says:

“Regarding Initial Terminal Delay: Having made the award that time should begin as soon as a man is required to report for duty, the arbitrators do not in addition to this recognize that there should be payment for initial terminal delay, since this time will be regularly paid for as a part of a minimum day’s work; and if men are held at the initial terminal for a considerable period, this may result in extending the time beyond the minimum of ten hours, or five hours in the case of through passenger service, and in giving compensation for overtime at the end of the trip in those cases in which the initial terminal delay is unreasonably long.”

“In regard to Final Terminal Delay: It has been suggested upon one side that the engineer has done his duty when he reaches the yard limits, and upon the other side that before he is paid for any delay at the terminal he should have completed

his full minimum day's work in hours. It seems to the Board, however, that if an engineer has made a good run and reached the entrance to his terminal, the road should not be allowed to hold him there indefinitely. It is clear that the duty of an engineer is not complete when he reaches the switch to the terminal; he has the duty of placing his train at the designated place in the terminal, and the additional duty, after this, of taking his engine to the roundhouse. Under favorable conditions this work would occupy a portion of an hour. The Board realizes that often, during times of congested business, it is not possible to get a train to its place in the yard, and the engine to the roundhouse promptly. If the roads do not make it possible for the engineers to complete their work within the hour after reaching the yard, it is the opinion of the Board that time beyond this hour should be paid for as overtime."

And in the Eastern Firemen's case, later decided by a different Board of Arbitration, it was awarded in Article I that:

"The time for which firemen will be paid shall begin at the time he is required to report for duty, and end when the engine is delivered at the point designated."

Article 4 of said Award is as follows:

"No initial terminal delay is allowed beyond that involved in the rule that pay shall begin in all cases at the time fireman is required to report for duty, but final terminal delay after the lapse of one hour will be paid for at the end of the trip, at the overtime rate, according to the class of engine, on the minute basis.

"For freight service final terminal delay shall be computed from the time the engine reaches the designated main track switch connecting with the yard track.

"For passenger service final terminal delay shall be computed from the time the train reaches the terminal station.

"If road overtime has commenced terminal overtime shall not apply, and road overtime shall be computed to the point of final release."

Now, I desire to call your Honor's attention to the fact that the brief filed here most elaborately presents an argument as to the necessity of having some terminal delay rule. It is said that "if by earnest efforts an engineer and fireman have succeeded in transporting a freight train in less than ten hours,

for which they have received pay for 100 miles, the railroad should not be permitted to detain them, because it could be done without incurring the expense of overtime." And he very frankly says, on page 34:

"For the purpose of preventing railroads requiring engineers and firemen to report for duty before their services are needed, this rule has been requested." "The rule is intended to be a penalty imposed." This rule. Why, the rule that they request is a penalty that you cannot escape at any time. Read it. It suggests, again, in another part of the brief, that it is a penalty that can be escaped by proper and efficient operation. Why, in the first place, of course, preparatory time, that is an absolute thirty minutes before the terminal delay, for engineers and firemen in passenger service, shall begin at the time they are called to leave roundhouse or other point, and shall end upon departure of trains from passenger depot. That is not delay at all. While it is headed terminal delay, it is making a separate computation for the distance, or time, rather, from the place that he reports until he gets to the outer switch. It is a penalty to avoid a practice that cannot be avoided. The engine must be brought from the roundhouse or other designated point to the outer switch, and this must be paid for, under this proposition, in addition to the time or miles of the trip.

Final terminal delay cannot be avoided. Under this, the so-called final terminal delay is not delay at all. From the time that a man gets to the outer switch, no matter what the expedition is, or in the case of a passenger train, taking his engine from where it cuts off at the passenger train, down to the roundhouse, cannot be avoided; it is in addition to the time or miles of the trip. A freight engineer has not completed his work when he gets to the outer switch. It is not claimed or contended that good railroading would permit of his being released at that point and somebody else coming and taking the engine to pull the freight train into the yard. But under this rule he is under delay, although the switch tender is there waiting for him when he gets to this switch. The switch is thrown without his ever coming to a stop. He comes through without interference and comes down to the place where his train is put on the proper siding and his engine uncoupled. But no matter how fast he has made the run, it may be 150 miles in seven or

eight hours, on one of these fast trains, and he is getting one day and a half in pay, but in addition to that, you must add separately the time from this outer switch until he finally gets to the place of final release. Why, it is an unheard of proposition.

Again, we admit, as Mr. Higgins described here, that there should be, as to final terminal delay, some reasonable rule to prevent any sort of abuse. When a man has made a good run, as they said in the Eastern Arbitration case, when he has arrived at his outer switch and has made a good run, you should not penalize him by keeping him there at the outer switch merely because he has not taken the ten hours to do it. No, make a reasonable allowance, this one hour, many of the railroads in the West give them that, or better, in the matter of the final terminal delay. Give them some reasonable leeway, give them the opportunity of being decent; give them the opportunity of having a fair average time to cover this work at the end of the run, the one hour which the East gave. They are on overtime anyhow. If it runs into overtime, they are paid for it, but irrespective of the question of overtime, yes. I say that if, beyond a reasonable time fixed as one hour in the East, whether or not that could be applicable to so vast a territory, one hour on the final terminal delay, can only be determined from an examination of these schedules; but every schedule practically has some provision as to final terminal delay.

As to initial, there is no excuse in the world, that is, in case the Board here adopts the view which was adopted in the East, of fixing compensated time from the time that a man is required to report for duty, because he goes under pay. The railroad company which detains him in any way at that time in the initial terminal delay, as well pointed out by the Board, is under penalty of paying him overtime, if that detention runs to such an extent that, counting the time from the time he reports there, until he is finally released, it runs into overtime.

Mr. Nagel: Yes, but he might still be unreasonably held at the initial terminal, that is, without having his time run into overtime.

Mr. Sheean: Yes.

Mr. Nagel: So that he would suffer a disadvantage, without getting pay for it.

Mr. Sheean: He would suffer, Mr. Nagel, the disadvantage of not making three or four days' pay in one.

Mr. Nagel: Well,—

Mr. Sheean: And that only. He could not suffer any disadvantage whereby, counting from the time that he reported for duty he would not be paid the full day for any ten hours in freight service or the full day for any shorter period of time that was fixed for passenger service.

Mr. Nagel: Of course, I am trying to find out just what the situation is. Suppose his run is normally seven hours, and he is unnecessarily held at the initial terminal for an hour.

Mr. Sheean: A run of what length?

Mr. Nagel: Well, of course, you had better state that.

Mr. Sheean: 100 miles?

Mr. Nagel: Yes, say 100 miles.

Mr. Sheean: Well, in that situation, he would receive no pay until he had given the ten hours due the company, if it was an even 100 miles.

Mr. Nagel: Precisely. Now, if he is unreasonably held one hour at the initial terminal, he has lost that time unnecessarily, without compensation, has he not?

Mr. Sheean: Yes, he has lost the ability to earn in less than ten hours, the pay agreed in the schedule as fairly representing ten hours.

Mr. Nagel: Very true, but he has not gotten the benefit of that advantageous run, has he?

Mr. Sheean: No, he would not have.

Mr. Nagel: That is one of the things he is interested in having, is it not?

Mr. Sheean: Yes, I think, unquestionably.

Mr. Nagel: So that he is interested in the manner in which that hour is consumed. I assume, of course, that the road does not want to waste it, but leaving that out of question for a time, he is interested in whether that hour is advantageously employed?

Mr. Sheean: Yes.

Mr. Nagel: Just as he is at the final terminal, for which provision is made.

Mr. Sheean: Not exactly in the same way, no, I would say not.

Mr. Nagel: Well, technically not, but does it not practically come to the same thing?

Mr. Sheean: No, I do not think it does, because at the final terminal the complaint, of course, was, as shown by Mr. Higgins' testimony here, that a man has made a good run, he had completed his work, he had given this day of 100 or 120 miles, and had done it in eight hours. Now, there is no inducement for the yardmaster, if there is no penalty, he is under no obligation whatever to let him in promptly. Now, before he starts out upon the run, it being here shown that the run in through freight service is about 112 miles and takes about 9½ hours, ordinarily, in the current run of business to do it, the yardmaster who causes any detention at the start is doing so at the risk of running it into overtime and paying for it at once. I do not know that it makes any particular difference, of course, there must always be, in any award that is made, the provision that we shall not count it twice; every schedule provides for that, most specifically.

Mr. Nagel: I see, easy enough, that the occasion for delay at the final terminal is greater than it is for delay at the initial terminal.

Mr. Sheean: Yes:

Mr. Nagel: Because, in the latter case, the risk for the railroad is very much greater than in the former, but the consequences to the engineer and firemen are the same in both, if the delay is unnecessarily visited upon them.

Mr. Sheean: If it is unnecessary.

Mr. Nagel: Yes.

Mr. Sheean: And now, it was practically admitted—the whole proposition is this, both initial and final terminal delay were devised as remedial measures. It is, of course, agreed that in the matter of getting trains out of the yard, or getting them in the yard, you have not the proposition of clockwork with which that can be done. The engineer and fireman getting down and ordered to report at a particular time may today take a different length of time to be able to get out of that yard with their train from what they encountered yesterday, or will encounter tomorrow. It cannot be an absolutely fixed and certain and precise amount of time that would be taken in doing that. Now, in the starting of the run, the engineer and fireman going

upon pay, the complaint is, the condition they were seeking to remedy was, that their pay only started at the time ordered to leave. All the schedules have been built up upon that theory. They would run it out some day.

Mr. Nagle: I appreciate that.

Mr. Sheean: The particular thing they were aiming at was that they were putting in various amounts of time and getting no pay for it, because their time, not merely their miles, but their compensated time, began only at time of departure.

Now, the particular thing complained about is that they took an unnecessary amount of time. It was remedial in its nature. They at all times have granted that there was a certain amount necessarily and unavoidably given, in the regular transaction of the business, antecedent to the time that you could get to the outer switch.

Mr. Nagel: Now, the two awards from which you have read, have undertaken to meet that situation by allowing compensation for the time when the engineer must report, up to the time when he delivers his engine.

Mr. Sheean: Yes.

Mr. Nagel: So as to cover all the time which he is in the service. They have gone further and have undertaken to provide against an unnecessary loss of time where it is most apt to arise.

Mr. Sheean: Yes.

Mr. Nagel: That is, at the final terminal?

Mr. Sheean: Yes.

Mr. Nagel: Where the engineer and fireman may be put to inconvenience without the railroad suffering a corresponding loss?

Mr. Sheean: Yes.

Mr. Nagel: They have undertaken to limit that delay to one hour.

Mr. Sheean: Yes.

Mr. Nagel: But they have concluded that there is not likelihood enough of similar delay at the initial terminal to make it necessary to make provision for it?

Mr. Sheean: Yes, precisely. The matter of both initial and final terminal delay, of course, is covered in various schedules now. The reason, I think, for the distinction between initial

and final is that, of course, the person incurring any initial delay is running at all times now, under this sort of an arrangement, the danger of overtime which, of course, is a loss to the company.

Mr. Nagel: Well, that would depend somewhat upon the schedule, would it not?

Mr. Sheean: Unquestionably.

Mr. Nagel: You might have considerable delay without incurring it?

Mr. Sheean: Yes. I am speaking more particularly now of freight service. Yes, it might be. Possibly you had in mind a fast passenger run, and of course, in that situation, there might be quite a difference. But our thought upon the matter of initial terminal delay, if there was any to a passenger train, is that the engineer upon a particular date having this fast run, he at least should share some part of the unforeseen that brings about a delay in the starting time of the train, and that you cannot possibly start that absolutely upon the minute from the terminal.

Mr. Nagel: In other words, in the passenger service, it is extremely unlikely, and in the freight service it is almost always dangerous.

Mr. Sheean: Dangerous, precisely, yes. Because, as these gentlemen, you know, have argued, we are getting clear down to the basis of hours now. You have heard a good deal of talk that with the heavy tonnage it is all on the hourly basis now, and they do not make any more miles in freight service. But the fact about it is, of course, that in the through freight service, the runs are scheduled as shown here, so that it does average over nine hours.

Now, the railroad companies, in thus according as they have here, that the time of men should begin from the time they are called upon to report for duty, letting the rates remain, which rates were based upon the fact that there was always some work done preparatory to and prior to the departure, have agreed to a proposition that means a concession of over \$450,000 in money to these railroads represented in this movement.

(At this point a short recess was taken.)

The Chairman: You may proceed, Mr. Sheean.

Mr. Sheean: In concluding what I have to say about this

proposition of terminal delay, Exhibit 1 will indicate, I think, that about 68 per cent of the roads now have specific provision for one hour on the initial terminal delay, and some of them are as short as one-half hour, so that I think that an examination of this exhibit will show that the possibility of undue delay at the outset is now covered in practically every schedule of all the railroad companies, and an award, therefore, following the Eastern Award in this respect, if there was specific provision, as there must of course be to prevent the possibility of claiming duplicate payments, would prevent any possibility of men being abused; if there was a disposition upon any railroad to abuse them. But there should also be the care taken that under different rules the same thirty minutes or twenty minutes, or one hour should not be used to claim pay for two or three, or several hours.

And it will also appear in this same Exhibit 1 that the specific statement is now contained in many schedules that time paid for under one rule will not be paid for under two rules for the same service.

Mr. Nagel: You recommend the method adopted by the Eastern Arbitration?

Mr. Sheean: The Committee is committed to that, in their communication to the men, and while I said just before adjournment, while it will cost the roads in this movement \$450,000.00, we do not feel that where men are compensated in hours, that their time should begin from the time they are called upon to report for duty until they are finally released.

Now, in that same connection, it does seem to us, however, that roads that have better than the standard ten-hour day at the present time, their talk is about bringing about uniformity, and bringing all rates nearer together, that roads which have better than the ten-hour day, by their basis of computing overtime or otherwise, exception should be made as to those roads which already pay upon a better basis than the basis which is brought about by this uniform movement, or this effort to bring about uniformity. In other words, that it should not serve further to spread the disparity that there is at this time.

Mr. Nagel: Do you say it will cost that much more than it does cost under existing rules now?

Mr. Sheean: That is the estimate given us by the various roads.

Mr. Stone: Does that include all three, preparatory time, and initial and final terminal delay?

Mr. Sheean: Oh, no. You mean your request?

Mr. Stone: In the \$450,000.

Mr. Sheean: The \$450,000 includes only the change which we propose to compensate men when paid in hours, from the time that they report for duty instead of compensating from the time called to depart.

That is, there are many railroads, and the practice has been described here, that the schedules have been built up in this way, ten hours or less shall constitute a day, but that day starts from the time called to depart. Now, the practical effect of this rule that the time shall be paid for from the time they are called for duty, is to shorten up in these rules this length of time, whatever that preparatory time is, in the preparation of the engine, or whatever time intervenes from the time they are called for duty, until time of departure; and just that change of time, of dating their time from the time of departure back to the time called to report for duty will cost the railroads here involved \$450,000.

Now, of course, it should be borne in mind that this question of arbitraries, as proposed here, ignores entirely the question of the length of run, or the time on duty, whether you can get the six or eight hours, or seventy or eighty miles on runs arranged where you can get neither one nor the other; that in addition to the fact that they have got to pay 100 miles for situations of that sort, there should be pyramided on top of that, or as Mr. Cadle very frankly said, the practical effect is to convert the ten hours or less rule into 10½ hours to be paid for in every situation, because 10½ hours plus this time between the roundhouse and the outer switch, the practical effect of the proposal here would be to convert the minimum from what it is now, of paying for 100 miles in every case, to 10½ hours plus the time between the switch and the designated point.

Now, I think on this Article 7, the proposal for the automatic release tie-up, that in view of what Mr. Carter said yesterday, I really do not want to say very much about it. He could not suggest to the Board on any question just how it could apply. Of course, these situations described here, these

fixed passenger runs, described by Mr. Keefe, where the engineer and fireman, instead of the \$200 that they are getting now, would run up to \$1400—yes, that is a fixed passenger run, and he gave details of a branch mixed service between Davis and Sulphur making four round trips with a total mileage of 75 miles, on which, in October, 1913, the engineer earned \$202.74, and the fireman \$119.04, and had this rule been in effect during that month, the engineer would have earned \$1435.75 and the fireman \$937.00.

I say in the brief that it is inconceivable, now that the men have knowledge of the actual significance of the rule proposed, as one of universal application in the entire country, that they will ask that this part of their proposal be seriously considered.

And that seemed to me practically the result of the inquiries made by the Chairman of Mr. Carter, yesterday. They say they would not want it to apply to any such situation as that, but they say, "Yes, your interpretation is right; that is the way it would apply on those very runs." Here is this branch line. The service has got to be performed; in accordance with the laws of the State of Texas you have got to give this kind of service, and every time that he gets back there will be this automatic release and a new day shall begin.

Now, I submit in connection with this suggestion that again there has been no witness called here of any abuse of the 100 miles or less, 10 hours or less proposition, together with the first in first out rule. Again, we have as the suggestion that the "awarding of the automatic release feature of this rule is necessary if such abuse is not to become the practice." What is the abuse that he speaks of?

"Since this Arbitration has commenced, some Railroads are deviating so far from past practice and the intent of existing wage agreements that Engineers and Firemen, after having transported a passenger train over a division of railway in the usual manner are then required to double back over the same division with a freight train and are paid for mileage made in each service, as for one trip, because the division is less than 100 miles in length. The awarding of the Automatic Release feature of this rule is necessary if such abuse is not to become the practice.

"If Railroads desire to be relieved of the payment of a

bonus for a fast trip or a short trip, they should be as liberal as other employers," etc.

Again it is said on page 38:

"The first-in-first-out rule for the distribution of work has been in effect since the beginning of wage-bargaining on Railroads. By its application discrimination in the apportioning of work has been made impossible; by its application Engineers and Firemen have been relieved upon arrival at terminals, and the Engineer or Fireman longest out of work has been next assigned. To prevent the abrogation of these practices long in effect the rule should be awarded."

Well, now, how in the world this Board is going to abrogate the practice or the rule of first-in-first-out is something beyond my comprehension. Where has there been a suggestion from any witness upon the stand here of any violation of the first-in-first-out rule? No one has suggested an abrogation of that rule in the present schedule. There are provisions in the schedules, as I called attention to yesterday, on page 275 of this Exhibit 1, where the hard and fast operation of the hundred miles or less rule is covered by specific exception. Permitting for instance of combining of a deadhead trip with a return trip. We do not think that is unfair. A man is called to deadhead out here to relieve a crew. Some roads have the provision in their schedule for the man thus called to deadhead, who is going out for the specific purpose of bringing in that train. Now he is paid for the deadhead trip out, and combines with that the trip of the train that he brings into the terminal. If he has miles he is paid for all the miles, of course, in any event.

But under this proposal it is here said frankly: You are sending out a man to relieve a crew here that is tied up under the law. Here is a crew that has gotten within twenty-five miles of the terminal. Through unforeseen circumstances the 16 hours are up. They cannot bring their train in. You call a crew to go out and tow in that train. Oh, we want 100 miles for this crew that goes out on the passenger train, because they get the same rate of pay as the crew of the passenger train. They have gone out 25 miles and we want 100 miles. And then we want that 100 miles for bringing in the train the 25 miles. That is what they mean, they frankly say. Some are insisting upon

what they call this pound of flesh in a situation of this sort. They want two days.

Now, the example given in this automatic release ought to so shock the conscience of any one trying to do justice between the men and the railroad companies, that the mere suggestion of such a rule ought to be abhorrent to any one that wants to treat fairly, whether he be on the side of the men or on the side of the railroads. The claims that are made of running out a thousand feet beyond the switch. Three or four days for bringing in the crews that may have reached the length of time they are allowed to be out. Going out to rerail a wreck. Mr. Cadle here gave some of the examples. He said, "This is a new invention." He said that under this proposal a man would be paid two days if called for a road trip, and before starting out assisting in pushing the train out of the yard for three miles, and then returning and taking his train out on a run of 60 miles in six hours. He would be out altogether eight hours, but entitled, under this rule, to two days' pay.

Now the modification of it here applies only to assigned pusher and helper. Oh, no, none of these occasional pushings such as Mr. Trenholm describes, pushing out of the yard. Why, a pusher engine sent out to assist a stalled freight train coming out of the yard, if it goes out on the main track in pusher service, 100 miles for 20 minutes' work. One hundred miles in road service, that is what we want, that is what it means. And what proof has there been here—again I ask what proof has there been here to justify the suggestion of the brief that there is any effort to abrogate the first-in-first-out rule, the 100 miles, ten hours or less rule? That is the situation in these schedules, 100 miles or less, 10 hours or less. The first-in-first-out rule. But under the insistence of applying the straight edge at all times, 100 miles is always 100 miles, that is the "or less" makes it a day. There have been written into these schedules \$2.75, \$2.78. These excepted cases of a series of short runs into a station, the combination of a deadhead trip out with a trip back upon the train, just those little equitable principles that I spoke of yesterday, the cases wherein the straight edge, by reason of its universality is insufficient not merely to wipe out, as under the other article, but to make it hard and fast beyond any question and dispute that those things are out for all time.

Now I don't believe, if the Board pleases, that anything more is necessary than simply to read the examples and results. And mind you now, they do not dispute any one of these. We read into the record here actual examples, not excepted cases, but fixed runs, fixed under the bureau schedules of these railroads showing the increase up to \$1,400 to engineers, \$600 a month and \$400 a month. I don't believe that it can be given serious consideration, and especially when the only answer that the proponent of the rule could make to the inquiry of the Chairman was, "Well, of course we don't want to apply it that way, but I don't know what to suggest to the Board as to how you could prevent us from applying it that way if granted, or what modifications could be made of it. We have made it, and pass it up to you." And we are likewise willing to pass up any such suggestions, in view of the disclosures in the evidence of the great injustice, of the iniquity of seriously considering such rules, and especially in the complete absence of any such provisions from schedules, and the complete absence of proof of any suggestion that justifies any further enlargement of the statement of ten hours or less, one hundred miles or less shall constitute a day, together with the statement of the first-in-first-out principle, which it is admitted is in all the schedules.

Mr. Nagel: You say then that not only is this rule arbitrary, but there is no occasion for any rule at all?

Mr. Sheean: Of this sort?

Mr. Nagel: Yes.

Mr. Sheean: Oh, absolutely no occasion for any rule at all. The brief here is predicated upon the violation of the first-in-first-out rule. And they have not shown any such situation. They have not shown any such thing as that. I don't think there is any question about that, that the men are amply and fully protected by those two rules. Those two rules, if your Honors please, are found in all the schedules, 100 miles or less, 10 hours or less. The first-in-first-out rule found in connection with that. If the man operating there in the pool, or operating under first-in-first-out rule on a railroad where that provision is found in the schedule, is entitled to his turn, and that is well understood in railroad practice, as shown by the testimony of Mr. Trenholm in this connection, and also the testimony of

Mr. Higgins, it is fully developed that there is not any real occasion except to enable them to have justification for these outrageous claims that are being made, which they say have as their foundation the first-in-first-out rule. If there was any proof of any abuse that was not met by the first-in-first-out rule, it is conceivable that there is some other rule necessary. But there has not been shown in the testimony here anything by which the men have not received all that they were entitled to under the schedule.

Now article 7 of the proposal also provides:

“Engineers and firemen tied up between their terminals will be paid continuous time, no deductions will be made for time tied up.”

I have set out at pages 68 to 69 of the brief the full text of the agreement which was made between the Western Railroads, their conductors, trainmen, engineers and firemen under date of April 1, 1908, which is transcribed from page 279 of Railroads' Exhibit 1. I wanted to get before the Board just the manner in which this question of tie-ups was covered at the present time under contract with the four organizations. Mr. Cadle stated that this was generally effective upon all of the railroads at the present time in this Western Territory. Now, I think perhaps I had better briefly refer to just what this contract provides, so that the Board may get before it just how the matter is handled at the present time. I will read the articles. Article 1 is as follows:

Under the laws limiting the hours on duty, crews in road service will not be tied up unless it is apparent that the trip cannot be completed within the lawful time; and not then, until after the expiration of fourteen hours on duty or under the Federal law, or within two hours of the time limit provided by the State laws if State laws govern.

ARTICLE 2.

If the road crews are tied up in a less number of hours than provided in the preceding paragraph, they shall not be regarded as having been tied up under the law, and their services will be paid for under the individual schedules of the different roads.

ARTICLE 3.

When road crews are tied up between terminals under the law, they shall again be considered on duty and under pay imme-

diately upon the expiration of the minimum legal period off duty applicable to the crew; provided, the longest period of rest required by any member of the crew, either eight or ten hours, to be the period of rest for the entire crew.

ARTICLE 4.

A continuous trip will cover movement straight-away or turn-around, from initial point to the destination train is making when ordered to tie up. If any change is made in the destination after the crew is released for rest, a new trip will commence when the crew resumes duty.

ARTICLE 5.

Road crews tied up under the law will be paid the time or mileage of their schedules, from initial point to tie-up point. When such crews resume duty on a continuous trip, they will be paid miles or hours, whichever is the greater, from the tie-up point to the next tie-up point, or to the terminal. It is understood that this article does not permit crews to be run through terminals unless such practice is permitted under their schedules.

ARTICLE 6.

Road crews tied up for rest under the law, and then towed or dead-headed into terminal, with or without engine or caboose, will be paid therefor as per Article 5, the same as if they had run the train to such terminal.

ARTICLE 7.

If any service is required of an engine crew, or if held responsible for the engine during the tie-up under the law, they will be paid for all such service.

Now, this agreement was made with the four organizations. It is effective as to all of them at the present time. Now, this proposition that the men submit here contemplates paying the enginemen while they are sleeping or while they are resting or while they are released from duty in accordance with the Hours of Service Law, or for any other reason. Mr. Cadle attempted to draw a distinction. I think I spoke of the law giving a certain length of time for rest, but he corrected me by calling attention to the fact that the law simply required him to be off duty, and he did not have to take any rest if he did not want to, and that

that was one reason why they ought to be paid this continuous time.

Now, this agreement here made by the four organizations has remained in effect ever since 1908. It has been suggested here that this agreement of April, 1908, was not satisfactory to the men at the time that it was made. But the correspondence in that connection discloses the fact that the men never asked for any such suggestion as here made at any time. Their first proposition to the railroad companies, and Mr. Rawn was chairman of the Managers' Committee, and which proposition was made by Mr. A. B. Garretson, P. H. Morrissey, W. H. Stone, and J. J. Hannahan, consisted of eight articles.

Instead of the Article 2, as found in this agreement here, the first proposal was:

"2. Employees in engine or train service tied up on the road in accordance with the law, shall be considered on duty and under pay immediately upon the expiration of the rest period fixed by the law under which they are tied up.

"3. Employees in engine or train service tied up on the road in accordance with the law shall be considered as having commenced a new trip when again going on duty and shall be paid regular schedule allowances for such trip, the same as if such trip had been started from an established terminal."

But at no time was there ever any suggestion or proposal that men should be upon continuous time from the time they started until they arrived at their foreign terminal, including the rest period which the law contemplates; and not merely under pay, but after a certain number of hours they get time and one-half while they are sleeping, because they are on continuous time under this proposal.

There has been nothing said in reply to the suggestion that this agreement was made in 1908, so far as I know, except the suggestion that it was not satisfactory when made. There has been no showing of any changed conditions in this regard since 1910, or changed conditions since the time that agreement was made in 1908; but upon the contrary, Employees' Exhibit 41, and Railroads' Exhibit 12, prove that of the men on duty more than sixteen hours, there is an average of but one such occurrence per man in eighteen months, and that on the total trains operated in

the year ended December 31, 1913, only .6 of one per cent were tied up between terminals on account of the Sixteen Hour Law.

It is of course manifest that recitals of the hardships of a particular trip upon a particular railroad can have little persuasiveness in determining whether or not conditions are better, or are improving from year to year with respect to the length of time on the road and the detention between terminals.

Mr. Carter testified, and he frankly admitted that the Wabash had been in very bad shape in 1913; but he testified that they improved 66 per cent in 1914, as compared with 1913; and in the present fiscal year, as was shown by the exhibit which the employes presented, 1914 shows a further improvement of over 50 per cent.

This Exhibit 88, submitted by the employes on the last day, making an analysis of operations for 1914 compared with those of previous years, shows a marked improvement. Taking this statistical analysis of the carriers' monthly hours of service report, comparing the fiscal year 1913 with 1914, from which that table shown in this Employes' Exhibit 88 was prepared, it shows for the railways involved in this movement that there was a decrease of over 52 per cent in the last year with respect to the hours in excess of sixteen on the roads in this Western territory.

In this same connection it is pointed out that any such proposal as the one here made should not remove the incentive from the men. I say this as Mr. Trenholm said it, in just the same spirit with reference to the men that I used it a short time ago with reference to the operating officers, in connection with trying to provide a meal hour. I said that you should not remove that incentive from the operating officer to try reasonably to provide a full meal hour for the switchmen. So I say you should not in any railroad operation provide one incentive to the man on the road and a different incentive to the officials who are co-operating with him in trying to get the train over the road.

Take this terminal situation; and I assign to the engineer and fireman just the same motives precisely that animate all humanity, no more and no less. They are no different. They are no worse and they are no better than other men; and when they get to within twenty miles of the end of a run, and it is

questionable whether they can get in under the Sixteen-Hour Law or not, suppose you say to that engineer and fireman, "Well, now, if I do make this last twenty miles here, my pay stops when I get in, and all there is ahead of me is to go to bed after I get in and register, and it is a case of bed anyhow, but under this proposal I can tie up here at this place. It is just as good as home, and only twenty miles away from it, and I can go to bed and just as good a bed as I would have at home, and draw my pay while I am in bed, just the same hours that I would be in bed twenty miles beyond."

I say I attribute to them no better and no worse and no different motives from those that would animate all mankind, and that it is a bad practice to have thus hung out an inducement to the man which is a different inducement than the one that now, according to all concerned, is animating both sides, the mutual desire of the men on the road, the train despatcher and the operating official, to get the train into its terminal to complete its run, just as rapidly as can be done.

Mr. Burgess: Mr. Sheean, will you not give the engineer credit for having a better bed at home than the one he will have when sleeping in the caboose or alongside the engine?

Mr. Sheean: Oh, yes; I was picking out Aurora or Joliet, where there is just as good a hotel as you will get at the Blackstone. That is what I am talking about.

Mr. Stone: Of course our engineers stop at hotels of that class!

Mr. Sheean: Mr. Burgess, I think, implied that they had at home a great deal better bed than they could get in places of that class.

Mr. Burgess: You do not mean to state that an engineer is always tied up at a place where he can get a Blackstone Hotel bed, do you?

Mr. Sheean: No, not at all, and I do not want to say that the possibility of tying up would always afford him the opportunity of getting just as good a bed as he would at home; but I do want to say that where there is the situation where at times he would do that, or where tied up for the purposes of rest, generally speaking, I think it is at points where there is some form of rest provided; because notwithstanding the talk we have heard here about this, outside of the recital of the condi-

tions upon the Wabash Railroad, and one or two isolated cases, there has been no statement, and I do not think anyone could say that the custom and practice was always to do a particular thing. I think the operating officials do not change their spots between the time when they were engineers or switchmen and the time that they become train despatchers or superintendents. I think they want to give their men the opportunity for rest, and I think they want to treat them well. I think they desire that they shall have rest, and I do not think there is anything about the mere fact that a man is promoted, one day an engineer and the next day a superintendent of motive power, that makes any particular difference in his make-up or desire to be fair to the men. As I say, Mr. Burgess, I do not believe there would be any different motive or line of reasoning that would animate a man because he was an engineer or fireman in that situation, than would animate any other man; but I do think it is a perfectly natural feeling that where one is about twenty miles from home and not sure whether he is going to make it or is not going to make it, he might get tied up inside of the twenty miles, and there is a good town and a good hotel in between there and home, he may get tied up on the road between there and home, but if he does get in under the Sixteen Hour law, it is a case of going to bed anyhow, and not under pay, or going to bed here where he is, under pay.

Mr. Shea: That is your opinion—your expression of opinion.

Mr. Sheean: Yes, my opinion, Mr. Shea, is that engineers and firemen are absolutely no different from the rest of humanity, and I am basing this suggestion upon the assumption that the same motives that would animate all mankind would probably animate them under like circumstances.

Mr. Shea: And you want us to consider it in that nature?

Mr. Sheean: Absolutely, yes. That is my opinion from my general observation and contact with men, which by the way has developed quite an admiration for both engineers and firemen, and the feeling that they are not a separate or distinct class, but that you find in them just exactly the same animating motives that you will find in the lawyer, doctor, or any other man in any walk of life.

Mr. Burgess: Mr. Sheean, granting everything is true

that you have stated relative to the gentlemen who are now managers, who have come up through the ranks, or whether they did or did not come up through the ranks, will you not admit that it is beyond their power to always tie a train up where there are good and proper hotel accommodations?

Mr. Sheean: Oh, yes, no doubt of it.

Mr. Burgess: And will you not admit that there is an additional expense when the engineer is tied up and stopping at the Blackstone Hotel, or a bed similar to that in the Blackstone?

Mr. Sheean: Unquestionably.

Mr. Burgess: So that if he could always get that bed, there would be a considerable item of expense in connection with it?

Mr. Sheean: No doubt of it.

Mr. Burgess: Now, Mr. Sheean, one more question and then I am through. Did you ever experience sleeping in some of the beds that it is necessary to sleep in, on these tie-ups that you are referring to?

Mr. Sheean: No.

Mr. Burgess: I do not think you need any advice from me, but I would suggest—don't ever try it.

Mr. Sheean: Was that your experience on the L. & N., or have you been on any Western railroad?

Mr. Burgess: No, I have not been on any Western Railroad. I only worked for one railroad; but in this position that I occupy—

Mr. Sheean: The beds you were speaking of were beds in Southern territory rather than in Western territory?

Mr. Shea: I was hoping you would carry that just a little bit further, and bring out what it could cost that fireman for a bed in the Blackstone and a morning breakfast and a lunch or a dinner at the Blackstone.

Mr. Sheean: I cannot speak from experience, Mr. Shea, in that respect.

Mr. Shea: And then compare the expense with his daily wage.

Mr. Sheean: I would not be able to give any estimate upon that.

Mr. Burgess: Mr. Sheean, one of your last remarks makes it obligatory to defend the South. In nearly every state we

have a law as to the bedroom facilities, so that you are guaranteed a clean bed, at least. I was speaking largely from my experience in sleeping at some of these terminals, where they say that they have a nice first-class hotel.

Mr. Sheean: That comes under the next article, "Held Away From Home Terminals," more properly than under "Tied Up Between Terminals."

My suggestion on this proposition for continuous time was simply this, that the law recognizes that men after a certain time should have rest; or off duty, as Mr. Cadle puts it; that while they are off duty, and as this agreement specifically provides, only when they are so off duty that they are absolutely released of all responsibility. If any service is required of an engine crew, or if they are held responsible for the engine during the tie-up under the law, they shall be paid for all such service, but that when they are off, and when they are entirely relieved from any service and from all responsibility, so as to get the rest which the law contemplated at the time of its enactment, it is only fair that during the time when they are thus resting, that they should not be under continuous pay.

What are they paid now? Under this agreement, where road crews are tied up between terminals under the law, they shall again be considered on duty and under pay immediately upon the expiration of the minimum legal period off duty, applicable to the crew, provided that the longest period of rest for any member of the crew be the period of rest for the entire crew.

Of course, here is the situation under this present rule. Tied up under the law, they have been on the road—and when they came to recite here, in the last few days of the hearing, the fact of a man being on duty twelve or fourteen hours, and that he had covered an entire distance of 26 to 30 miles in that length of time, I want you to bear in mind that there has been a considerable part of that twelve or fourteen hours in all probability passed upon a side track somewhere, or in endeavoring to repair. The time has not been occupied in the actual making of miles upon the road. Under this law, the railroad company cannot tie them up until after fourteen hours. The man is paid to the tie-up point in that case, at least 1.4 times a day, or he is paid

1.5 times a day if it be fifteen hours. He is under pay up to the time that he is released from all responsibility for the engine, and for all service in connection with it. At the expiration of the rest period he is again paid up to the completion of his trip. That is the situation under the present agreement.

Again, I would like to be advised as to just where the proof is in this case as to changed conditions under which they work, under the present requirements as compared with the conditions in effect when the present schedules were agreed upon. Here was the agreement entered into in 1908. The present schedules of which it forms a part were again agreed upon in 1910. The predicate for any change in any of these articles is announced in the opening statement, and I am quoting the language in that respect. It is "Changed conditions under which they work under the present requirements, as compared with the conditions in effect when the present schedules were agreed upon."

I submit that not only has the proof here failed to establish that there has been any change with respect to holding men between terminals, but that their own exhibit shows that in the last year there has been a marked increase, an increase to the extent of 50 per cent; and each of the succeeding years, as you carry it back, shows greater and greater expedition in this regard, and fewer and fewer tie-ups between terminals.

Now, the eighth proposal, Mr. Burgess, is this one of "Held Away from Home Terminals;" and the only witness I think who went to show a greater length of time held away from home terminals now than in 1910, was Engineer Smith of the Chicago Great Western. Of course, he counted the time that he was held away from his home terminal the opposite end to what the company had designated as the home terminal. He said he figured on Oelwein, while they designated East Stockton as his home terminal, but that East Stockton was a place where he did not like to lay over, and the lay-over at the other end was just the same, and then he compared that with the time he laid over in Chicago in 1909. But, back in 1909, the Chicago Great Western operated its division out to Dubuque, a long division. Since then they have divided it into two divisions, and put in East Stockton as a division point. Engineer Smith is running from East Stockton to Oelwein, and he says on this new division from East Stockton to Oelwein he is held away from home ter-

minal longer than he used to be held when Chicago was the terminal of this run in 1909.

The only other witness, so far as I could find from the record on behalf of the men, who was asked to make any comparison between present and former conditions in respect to being held away from home terminal, is Engineer Jones, and he said there had been no change in the last three or four years in the matter of lay-overs at away from home terminals.

Of course, again we have, in this proposal, something that it is tacitly admitted they never meant, although it still stands unmodified; because Mr. Cadle said that the rule as drafted covered regular passenger as well as way freight assignments. That is, a man bidding in one of these long runs, we will say, from here to Burlington, supposing that was scheduled so that a man made the run out today and then he had twenty-four hours at Burlington before he came back. I understand the practice now is that he makes that run and then doubles back, and then lays over forty-eight hours at the home terminal; but if the assignment was such that on a run of that sort he ran out and stayed there twenty-four hours after the run, before he came back, if he bid that run in, and took that regularly assigned run that is scheduled, they would have to pay him for the time held away from home terminal out there on the assigned service, no matter what the time provided by the regular assignment as to the lay-over at designated points may be; this proposal as drafted asks that "engineers and firemen held at other than home terminal (including rest period), will be paid continuous time for all time so held, after the expiration of fifteen hours from time relieved from previous duty, at the rate per hour paid for the last service performed, less than one hour not to be paid for."

Now, I do not really think it would be seriously contended that an assigned run should fall under provisions of any such rule with respect to held away from home terminal. If the run is arranged so that at each end of the lay-over it would be twenty-four hours or any number of hours, and the man saw fit to take that run just as it stood, and bid it in, why there is no reason for the imposition of any such rule as this.

Both the witnesses Keefe and Trenholm, in response to questions, admitted that in pool service or unassigned freight service, or any other burden of unreasonable detentions at the ter-

minal away from home, ought not to fall upon the men, and that is the disposition of the committee. Mr. Trenholm was asked by one of the Arbitrators, I think, as to what he meant by the statement that there ought to be some reasonable rule provided to cover the possibility of men being held an unreasonable length of time at terminals away from home, and he said that upon arrival at this away from home terminal, in ordinary, usual practice, the men would require ten hours' rest. Now, that first ten hours at the end of that run certainly ought not to be considered in any kind of a computation, because the getting to this destined terminal and getting their rest at that terminal is a part of the work of an engineer and fireman. Then, Mr. Trenholm said that after the deduction of that ten hours, it was his viewpoint that for every twenty-four hours a man was detained, the theory of giving a man a day's pay in every twenty-four hours would not be unfair.

Mr. Trenholm also said that the Committee, during the negotiations here, had finally said that they would be willing to accept a thirty hour rule, which is four hours less than the time he outlined in the manner I have just indicated, namely, that the first ten hours after arrival be set aside, because a man is really entitled to that ten hours, and should take it for his rest. Then, after that ten hours, here is a man ready to go to work. The company has not any business ready for him. The traffic is not balanced. There is nothing ready to come back. The engineer has gotten out there, and there is no business to justify the starting out of another train. He is just waiting there. He is not working; but as stated by these witnesses, the burden should not fall entirely upon him. So that, taking the ten hours that was his, from the time that he comes back and is ready to go to work, if there is no work for him to do, why, at the end of twenty-four hours he ought to be paid one day's pay.

The reason that we suggest that situation is that our exhibits here show that in this territory in the West, the traffic is only about one-third as dense as it is in the Eastern territory. It fluctuates. There is a lack of balance to the traffic. Nobody disputes the proposition that all the traffic during a particular time will be in one direction. You have got to take your trains in that way and do the best you can, and get your crews back in the other direction. You cannot control it, and

cannot balance it as well as in the more densely populated territory.

In the Eastern Engineers' case the Award of November 2, 1912, was:

"Engineers in unassigned freight service held twenty-eight hours at other than designated home terminals without performing service, are to be paid overtime rates as follows: Ten hours for the first 28 hours so held, and 10 hours additional overtime for each complete 24 hours so held thereafter, provided that this regulation does not apply to engineers delayed by reason of compliance with the law, or obstruction of the line through act of Providence."

In its supplementary explanation of the Award, the Board said:

"The Award regarding the allowances made when men are held away from their home terminals, is in general accord with the principle now in force on several of the important roads in the Southern District."

And that is the situation as shown by our Exhibit 21, that 28 hours is the time fixed in the Southeast very largely, and 28 hours fixed by the Award.

In the Firemen's Award in the Eastern territory, they begin the computation of time at the expiration of eighteen hours, but count each hour of the time. Mr. Phillips at one time said those two propositions are precisely the same, but a little later, when I offered to substitute this one and to trade with him, he was inclined to think they were not quite the same.

Of course, the difference between the two is that at the expiration of the eighteen hours in the Firemen's case, a man goes upon pay and is paid for each hour of the time. The theory of the Eastern Engineers' case seems to be that after taking out the hours of rest, then when a day is completed, at the end of each day he should have a day's pay. And I simply want to submit in that connection that as I will call attention in the morning, in the only case in which the question has been arbitrated in the West, with a single railroad, the thirty-hour period has been fixed by that Award.

The Chairman: We will now take an adjournment until tomorrow morning at 10 o'clock.

(Whereupon, at 5 o'clock P. M., March 31, 1915, an adjournment was taken to April 1, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
 ARBITRATION
between the
 WESTERN RAILWAYS
and
 BROTHERHOOD OF LOCOMOTIVE
 ENGINEERS
and
 BROTHERHOOD OF LOCOMOTIVE FIRE-
 MEN AND ENGINEMEN
under the Act approved July 15, 1913, by agree-
ment dated August 3, 1914.

Chicago, Illinois, April 1, 1915.

Met pursuant to adjournment at 10:15 o'clock A. M.

Present: Arbitrators and parties as before.

Mr. Sheean: May it please the Court, at adjournment time last evening we were discussing the proposition concerning engineers and firemen who are held away from their home terminal, and I have called attention to the Award in the Eastern Engineers' Case, of 28 hours, and the basis upon which that Award was made, namely that that was the practice largely in effect in Southeastern territory, and had stated that the Eastern Firemen's Case differed from the Engineers' case in that time began at the expiration of 18 hours, and all of the time thereafter was paid for continuously, whereas in the Engineers' case the day, the completion of the day, made a completed period of one day's pay.

I wish now to direct attention to the fact that the only railroad in Western territory where the question of held away from home terminals has been submitted to arbitration, with the time fixed and the award made, is on the Burlington Railroad, where in the Arbitration with their trainmen the Award was handed down in February, 1914.

The request was as follows:

"Pool crews held away from their home terminal twenty-

four hours or more from time of arrival will be paid ten hours pay for the twenty-four hours so held."

And the Award was:

"Pool crews will be paid 100 miles for the first thirty hours held at other than their home terminals, and 100 miles for each twenty-four hours held thereafter, except in case of snow blockades, washouts or serious wrecks preventing the operation of trains."

This rule is practically the rule which appears in the Chicago, Milwaukee & St. Paul schedule shown at page 287 of Railroads' Exhibit 1. And this rule is the only rule on the subject in Western territory which has been arrived at in an arbitration proceeding.

Now we respectfully suggest that in considering a rule upon this proposition there is no reason why the rate that is paid for the man who is being merely held for service, not actually performing any duties, should be as here proposed:

"At the rate per hour paid for the last service performed." That is, this rule in its fundamental, underlying reason, must be to compensate the man for time lost. He is not performing service.

And a man coming in on one class of engine, and taking a certain rate of pay because of the work that he performed, and has completed, and is being paid for at a certain rate, should not, merely by virtue of that fact, take a different or higher rate of pay while he is being held at the away from home terminal, than the man who came into that same terminal, waits the same number of hours, but came into it on an engine which took a different rate of pay.

In other words, it is our belief not that they should be put on the same basis in both passenger and freight service, but that whatever payment is made to compensate the men after the lapse of a certain length of time should be the minimum rate in the class of service in which he is engaged. If he is in freight service it should be the minimum daily rate in the class of service in which he is engaged, whatever that class of service may be.

Now in our brief we have called attention to the fact that the testimony of the employes themselves admits that the hardships occasioned by being tied up between the runs are unusual,

transitory, and made so in their occupation; that the man tied up on one trip may catch the fast freight on his return trip; and employes who were questioned about it say that in pool service they average up pretty well at the end of a month or a year, the fast trips with the slow. And, consideration should be given in that connection to the fact that we show by Railroads' Exhibit 13 that during the fiscal year ending June 30, 1913, the railroads involved paid to their engineers and firemen in freight service over \$1,000,000 as allowances above the actual miles or actual hours; that this amount was paid in freight service alone, and when all classes of service are considered, the companies paid \$1,400,000, for which no actual service, either in miles or hours, was rendered by the men; that is, where the runs were both less than 100 miles and the hours less than 10, the mere difference between the agreed minimum and the amounts actually paid was over \$1,000,000 in the year.

Now, as I said yesterday, there has been no suggestion made here in support of the claim that any allowance of this nature should apply to assigned runs; that is, passenger runs or local way freights, that are regularly assigned to run by a certain schedule, and which are bid in, in the exercise of seniority, may, as a part of that selected work which the men take by their seniority, have, at away from home terminals, the provision for a lay-over of any number of hours that may occur regularly throughout a month's running. So that in substance and effect, as shown by any schedules that have any provision, or any award that is made, a held away from home terminal provision is always made specifically to apply to pool or unassigned service, therefore, the suggestion as to the minimum rate of pay applying should be the minimum rate of pay in pool or unassigned service. There is a possibility, of course, in what is called messenger service, which is specifically covered by most schedules, and practically. I say, without referring now to the exhibit, that it will be found that the theory there is the theory practically which was adopted in the East, and practically the theory which Mr. Trenholm outlined in his testimony here, and also the theory followed in the Eastern Engineers' Award, namely, that at the end of 24 hours, 24 hours ordinarily furnishing the time within which a man should make a day's pay, that at the end of that 24-hour period a day's pay should be given to him.

Of course in this connection it is only proper that the Board should have constantly in mind in making any award on away-from-home terminals the necessity of providing that men should not draw pay under two rules at the one time, because here again we find in actual practice the situation where men have made claims, where there is an away-from-home terminal provision, and that they are drawing pay because of being held away from the home terminal, being after the thirty hours or after the twenty-four hours, and they are called to start out upon a run, and although they are under pay on the one rule, claims have been made that they should receive pay under the two rules, one because held away from home terminal and the other because they are called to report and are under duty to go back on the return trip.

Article 9, covering the matter of deadheading, I propose to discuss only very briefly.

In the brief filed on behalf of the employes, at page 43, attention is called to the fact that more than 98 per cent of the railroads in Western territory pay for deadheading on varying bases. Seven per cent pay the same rate as engineer or firemen on train is paid.

A question asked by the Chairman during Mr. Carter's oral argument, namely, whether it was the theory of the organization that men who were deadheading were performing duty for the company and therefore should be under pay, is a theory recognized by all railroads, as shown by their schedules. There is not any question but that a man called to deadhead by the company is paid under present schedules. But these schedules are built up to meet the necessities of particular railroads. As Mr. Trenholm well pointed out, the fluctuations of traffic upon different railroads in different parts of the country, different lengths of division, different conditions with which the operating officers are confronted, make necessary provisions peculiar to the different roads, as to just how important or unimportant the matter of deadheading may be, and as to the manner in which the deadheading shall be paid for. Again I call attention to the fact that no witness has been called here who has testified that under the deadheading rule of any railroad company the pay that he drew on any trip or any number of trips did not produce him fair and adequate compensation.

Many of these schedules provide that when a man is called on a deadheading trip, the railroad may combine that deadhead trip out with the return trip. One of the points made in this brief is that men sometimes lose the opportunity for another run, and are deprived of opportunities to earn full wages in other assignments.

As a matter of fact, a person called for the purpose of dead-heading is ordinarily and usually called to make that deadhead trip for the specific purpose of bringing in some train, or doing something in connection with the operation of that railroad. It is said that his being called to deadhead may cause him to lose the next run out. But when called to deadhead in such a situation as that it is ordinarily for the purpose of going out to bring in some train, to relieve some other crew. Some of these schedules provide that the person thus called shall be on continuous time, on the deadhead trip out at a certain rate, and on the return trip at the full rate, for whatever class of engine he may bring in. Our Exhibit No. 1 shows in just what manner this duty of engineers and firemen is paid for; because it is a duty, and it is paid for.

It is the opinion of this committee that when a man is called to go out and ride a passenger train to a certain point and there bring in a train, it is proper that a combination of the deadhead trip and the service trip be made, and that there is no reason why the deadhead trip out for a short distance, say 20 or 40 miles, should be separated from the other service. This proposal contemplates that for that trip out, 20 miles, he would be paid the full day's pay, if he rode out on a passenger train, because he would be paid just the same amount as the engineer calling that train, one full day, and then on the return trip back, picking up this train and relieving a fireman at a distance of 20 or 40 miles from the terminal, he would draw another day's pay for bringing it back to the terminal. If an engine crew was sent out on a passenger train to bring in a train tied up under the law, you would have to pay the full hundred miles for the deadhead trip, and a minimum day for bringing the train in. We submit that that is not fair.

The Chairman: Do I understand you think that under this proposal if an engineer is called to go out 20 miles, and he takes one hour to run that twenty miles, and then he immedi-

ately returns with the train, or engine, or whatever it is, to his home terminal, he would draw pay for two days for that.

Mr. Sheean: I think so. I submit to these gentlemen that that is what their proposal means. There is no contradiction of it.

Mr. Stone: Let me hear the question. My attention was diverted for the moment.

Mr. Sheean: The question was substantially this, Mr. Stone: A man called to deadhead makes a trip out on a passenger train, taking him one hour, and then brings in a freight train. The question of the Chairman was whether or not this proposal would not require that he be paid one full day, that is, 100 miles for the passenger trip, and another minimum day of 100 miles for the return trip.

Mr. Stone: Yes, that is the intent of the Article, but that is the extreme case and the exception, and not the rule.

Mr. Sheean: But that would be the effect under the rule.

That situation is provided for in many schedules, whereby you can combine those trips; and we direct attention to our exhibit as to how it is necessary to provide for just that situation.

The Chairman: Suppose he goes out 50 or 100 miles. Why is he not entitled to pay for the time that he gives and the service he renders in going out there? He is in the service of the company.

Mr. Sheean: He is, and every schedule provides for it. I challenge these gentlemen to produce a single schedule that does not provide for paying him for it. But if he rides out on a passenger train it provides ordinarily for paying him one half the amount that is being paid the engineer who has the care and responsibility of that train. If he is deadheading out upon a freight train, ordinarily under the schedules he takes the full rate of pay, because it is slow in going out.

The Chairman: If in the management of the road they have to use him in that way, and they take his time, that is all he has to sell; and if they take his time in going out there, why is he not entitled to the same pay as he would be if he were running the engine? He is going out for that purpose. He is going out in that service. Upon what theory would he not be entitled to it?

Mr. Sheean: Well, on this theory that a man who has charge of the engine and running the train is being paid part of his wages for the care and responsibility which he has in connection with the operation of that passenger train. That a very substantial part of the wage of the engineer is paid for that. And that when he rides upon a passenger train as a passenger, merely for the purpose of performing this work—there is work waiting for him ordinarily when he is deadheading—that when he is merely riding as a passenger he is fully compensated by making the trip, if you please, on this 100 miles that your Honor speaks of, out, if he receives on that trip out one-half of the amount paid the engineer of the passenger train. He goes out with ordinarily the guaranty of a minimum day, unless it is combined with other service within a certain period of time, carrying into it this minimum guaranty in the great majority of cases.

Mr. Nagel: In other words, the adoption of the rule that full pay is to be allowed for deadheading would again dispose of the argument that responsibility, exposure, etc., furnish a foundation for compensation?

Mr. Sheean: I think so, yes. That a very large part of the pay to the man who is at the throttle is predicated upon the care and responsibility that he has in connection with it.

Mr. Nagel: The man who deadheads does not care whether he is riding behind a Mikado engine or a small engine?

Mr. Sheean: It makes no difference, except, of course, that if he is on a freight train they ordinarily recognize that if you have to deadhead a man out on a freight train, that the time is so slow in doing that that they pay the man on the freight train the full pay that is paid on the freight train.

Mr. Nagel: But what I mean is, that there is no occasion for discriminating between weight on drivers; that does not obtain when he is deadheading?

Mr. Sheean: Precisely. And that point we tried to bring out very fully in the brief, that we can conceive of no reason in the world why the style or type of engine that is up ahead in the train should in any way influence the pay of the man riding in the coach. And deadheading, of course, he is riding in the coach, for the purpose of performing the arduous work, and the responsibility connected with the trip of coming back.

The Chairman: You take the government of the United

States; they send a special agent out, and he rides from Washington City to Denver, Colorado. Now, he doesn't perform any work; he doesn't do anything until he gets there. Then, of course, he goes to work in the performance of duties that are incident to the position he holds. Now, does not the government recognize the fact that he is in the service of the government from the moment he leaves Washington City, and doesn't he receive his salary or per diem in going to the work?

Mr. Sheean: Yes, if he is on a salary.

The Chairman: Well, if he is on a per diem?

Mr. Sheean: On a per diem?

The Chairman: Yes.

Mr. Sheean: I should say yes. Yes, on a per diem.

The Chairman: Upon the theory that he is in the service of the government, and is giving the government that amount of time.

Mr. Sheean: Yes. I assume that the government also has naval constructors, or other people, who perform specially skillful work upon arrival at a particular place, predicated upon the exercise of care and responsibility after they arrive there?

The Chairman: Yes.

Mr. Sheean: Now, I would assume that in such a situation, at the time that the actual responsibility, where a high per diem fixed upon performance at that time and place, occurs, that they would recognize a difference between the time traveling to the work, and the difference in the allowance that is made for it, and the time where this large amount, whatever it be, based upon the actual skill, ingenuity, or whatever it may be, is exercised at the seat of work.

The Chairman: I don't know. I have never looked into that. But I know ordinarily when an agent goes out for the Government he is paid from the time he leaves home, his per diem, just as much when he is traveling, and his expenses, as he is paid after he gets there, upon the theory that the government is taking his time, that he is giving his time.

Mr. Sheean: Well, I grant you here that if these men are willing to go upon a purely time basis when the schedules can be so changed that they are paid simply for their time, so much per hour, irrespective of whether they be handling a Mallet engine, irrespective of whether they handle any other type

or style of engine, but are on an hourly basis, that is, that we have a right to call upon them for all the skill that they possess, and pay them on a purely per diem basis, simply buying their time, and buying only that, that then the argument of time called for duty until finally released on any trip, it being the uniform basis spread through it all, that then the argument would be very persuasive.

The Chairman: The use of the words "time" and "miles" have a tendency to confuse me. But at the same time, if you are working on miles, I imagine you measure it in time after all, as to the time consumed. It seems that is the way, that is to say, the railroad says "We are entitled to 100 miles, or so many hours," and if he performs 100 miles within the hours, why, of course, the railroad gets the service for the amount that it agrees to pay for the 100 miles within the certain length of time.

Mr. Sheean: But beyond that, they also pay for all the additional miles, no matter how short they may be. They have here first, the guaranty of every mile that is run. It takes a certain mileage rate, no matter how many miles they run, irrespective of time. I cannot continue to use him without paying for every additional mile. So he also has the guaranty of the minimum wage, irrespective both of time and miles, the guaranty as to miles. Beyond that, the guaranty as to what every hour shall produce during this time. And this minimum guaranty ordinarily is carried out with reference to deadheading also. "Allowed fifty miles deadheading over one district or less, with a minimum of 100 miles, if not used." "Company business, on passenger trains, one half actual mileage at four cents per mile, on freight trains actual mileage at four cents a mile minimum of 100 miles, no other service on that day."

The Chairman: What are you reading from?

Mr. Sheean: From our Exhibit 1, page 291. The one I just read from was the Soo Line. And various provisions adjusted to meet the peculiar conditions of different roads appear here.

Now there is, as we suggest, no railroad that does not pay some amount of deadheading. The theory of the railroads has always been that the man riding on a train for the purpose of taking charge of an engine at some other place, either en route

or at the other end, was not performing the same service that the man actually in charge of the engine and actually at the throttle was. The theory was that he should be paid, but not paid the same amount as the man who had the responsibility at the throttle. And, therefore, these schedules have been built up upon that theory, and the particular method and manner in which it is done on the different roads is shown in detail at page 291 of this exhibit. And as I said a little while ago, not a single witness has been called on behalf of the employes here who has testified that upon any trip, upon any railroad, at any time, was he paid less than a fair and adequate compensation for any dead-head trip that he made.

The Chairman: Do you not think that if some rule could be adopted by which no injustice would be done the men and on the other hand no injustice done the railroads, it would be desirable?

Mr. Sheean: I should say yes, if we had in mind just what injustice we were aiming at, if we knew what we were seeking to correct, if we knew here that some injustice had been done on some railroad under this rule.

The Chairman: I mean to give the men that to which they are entitled, and not take away from the railroads anything which should not be taken away from them.

Mr. Sheean: I think such a rule might be framed, but whether it could be made of uniform application so as not to be unfair to certain roads in a territory as wide as this, I would have considerable doubt.

Take, for instance, the necessities of a grain road, that at a particular time of the year must figure with the seasonal fluctuations, where all of its traffic over a certain division practically is coming in one direction; or, take an ore road, that has the seasonal condition that during certain months it has all its traffic in one way; what would be a real necessity in the operation of that road that they must contemplate and provide for deadheading regularly upon that road, would present a different situation from the one which is presented on another railroad where the traffic is practically balanced at all times and where you might justify practically a punitive rule on this second road in the matter of deadheading, because the possibilities and opportunities upon the two roads would be entirely different. And if we

knew just what, if any, injustice were sought to be corrected by a uniform rule, then I think we might approach the consideration of that question as to just what we were seeking to correct in any injustice to either side. Now, I do not know what that is. They simply ask for this rule, which I think manifestly, as asked for, would be a most unjust rule to any company, to pay the man out this distance. And deadheading, mind you, out for the purpose of relieving a train under the law, that must be tied up, or else the crew relieved, is a practice that ought to be encouraged. Now, where a railroad company, through some unforeseen thing, has a crew out within twenty or thirty miles of its terminal, and it must, under the law, put that crew in on the siding, it cannot permit them to pull that train into the terminal, they have got to go in the siding and be tied up and go off duty, now, I say, the practice ought to be encouraged of railroad companies sending out a relief crew, having the crew go out on a passenger train and drop off and tow in the train with the crew there. It ought to be encouraged.

This rule would say, if you do that and send men out to relieve these men, you will pay 100 miles to the engineer that goes out twenty miles and another 100 miles to tow that crew in. I say that no such thing as that ought to be thought of. And yet that is what this rule provides for.

It is one of the things that there have been conflicts about here. Under this 10 hours or less, 100 miles or less rule claims have been made in just that situation, and here we have a specific provision for it.

Now, the railroad companies, in their schedules, have endeavored to provide for and to prevent any such contingency as that, of combining the two. The man must get, within this period of time, his minimum day, no matter how short it is, ten miles even, deadheading the crew out and bring the other crew in. You have to pay the minimum day if you do combine them. And if there was, as I suggested, your Honor, any showing here in the evidence as to just what we were trying to correct, it is possible that a rule fair to everybody or to meet that particular situation might be evolved from it. But the rule on any of these railroads as shown here, I submit, has not been shown ever to have worked any injustice to anyone. On the other hand, we know from the mere statement of what this rule contemplates

that it would work an injustice every time that this situation arose.

The Chairman: Is it not your opinion, Mr. Sheean, that most of the irritation and confusion incident to the management of roads, as between the men and the roads, is due to the fact that there are so many conflicting ideas incorporated in the different schedules upon different points?

Mr. Sheean: No, I do not think so, your Honor. I do not think there is a schedule here that is not fully understood by the men on that railroad and the management on that railroad. The conflict that arises is just the suggestion that was so well illustrated in the colloquy between Mr. Stone and Mr. Trenholm. The men who have had a schedule for twenty years as to where pusher and helper service should be maintained, know that schedule perfectly well. It is only when the straight edge is attempted to be applied in this way that then the conflict arises.

The Chairman: Do you not think that if these little inequalities could be ironed out it would do much to bring about a better feeling between the men and the railroads and avoid a great many of the controversies that have heretofore existed?

Mr. Sheean: Yes, if that were possible or permissible. If you can find uniform conditions, and, of course, there is a certain degree of uniformity in all railroad operation, now, just in so far as that uniformity exists—I will say again, to use one of the smaller lines, take the Louisiana & Arkansas and the Burlington Railroad; insofar as conditions are common to those railroads, so that a uniform rule will be fair to both, then I think it would be well that that should be adopted; and that as a minimum, of course, fair to both. It must be one that would be fair to both.

But on top of that, there then may be reasons why, upon one of those railroads a more liberal deadheading rule should be provided under the operating conditions of that road than would be justifiable on the other railroad. Now, that is the situation we are in now, that these better conditions that have grown up upon the particular railroads are still to obtain, and properly so. And they should obtain because you are only asked to fix a minimum as to all these things, one that can be applied fairly to all. Now, if there was a showing that any particular railroad here, under its deadheading rule, had done any injustice

to its men, so that we could tell just what injustice we were seeking to correct, then I would say that there would be no objection to approaching that in the good faith effort to try to correct any such injustice. That is what we want to do, if there is any there. But we have never been advised and never have heard in the conference or from any witness here, where any man on any deadhead trip on any of these railroads was not paid an amount that was fair.

Mr. Burgess: Mr. Sheean, may I ask you a question, please?

Mr. Sheean: Surely.

Mr. Burgess: I understood you to state that if there was a different condition on two lines that operated the same engine in the same service, that that should be corrected. Is that right?

Mr. Sheean: Yes, conditions being the same.

Mr. Burgess: So, if we had two trunk lines running out of Chicago operating the same size engines and under the same rules, in your opinion, the rates should be equal?

Mr. Sheean: The same density of traffic? I spoke particularly on this rule in connection with the balancing of traffic on the two lines.

Mr. Burgess: Well, the density of traffic would probably be approximately the same on two trunk lines running out of Chicago, would it not?

Mr. Sheean: I could not say that, no.

Mr. Burgess: Neither could I. But here is the Atchison, Topeka & Santa Fe and the Chicago, Burlington & Quincy; now they probably could be termed trunk lines, would they not?

Mr. Sheean: Yes.

Mr. Burgess: And operating the same engines with the same rules, of course the same rates should apply, if I understood your statements correctly. Is that right?

Mr. Sheean: If you had all of the same underlying rules, yes.

Mr. Burgess: By underlying, you mean, I presume, the—

Mr. Sheean: Compensatory rules, things that bring the money home, yes.

Mr. Burgess: Then the rate should be absolutely the same?

Mr. Sheean: I see no reason why there should be any

difference, all conditions that affect the work of the engineers and firemen being the same on two railroads running through the same territory, why they should not pay the same wages.

Mr. Burgess: Let us get back to deadheading a moment. If I understood your statements in reply to the Chairman, you said there had been no testimony introduced to show where an engineer was improperly paid. Is that right?

Mr. Sheean: Yes, under any deadhead rules.

Mr. Burgess: When you referred to testimony, did you mean testimony introduced by the Employees, or any testimony?

Mr. Sheean: Any one.

Mr. Burgess: Of course, you understand that this Board should consider the testimony emanating from either side.

Mr. Sheean: Oh, absolutely, yes.

Mr. Burgess: Well, do you recall when Mr. Trenholm was on the stand that an example was given to him, where, if an engineer was called to deadhead fifty miles and was given no other service for twenty-four hours, that his compensation would be only \$2 on that road?

Mr. Sheean: I do not recall that, no.

Mr. Burgess: Well, if it was in the record it could be easily found.

Mr. Sheean: Yes. I do not remember what road you are inquiring about.

Mr. Burgess: I am speaking about the road of which Mr. Trenholm is General Manager, which I understand is the Omaha. That rule provides for four cents a mile, or a certain number of cents per mile for half the mileage deadheaded. Is that right?

Mr. Sheean: The company pays one-half the actual mileage made at four cents per mile.

Mr. Burgess: So that if the engineer deadheaded 100 miles, he would receive on that trip of 100 miles \$2 for deadheading, would he not?

Mr. Sheean: Yes.

Mr. Burgess: Do you recall that Mr. Trenholm was asked the question if he thought that was a fair compensation for an engineer for twenty-four hours?

Mr. Sheean: I do not recall, Mr. Burgess.

Mr. Burgess: If it could be proven that Mr. Trenholm admitted that that was not a fair amount of wages for twenty-

four hours, would you not then consider that some rule should be formulated by this Board?

Mr. Sheean: Yes, assuming that all those things were stated by Mr. Trenholm, of course the answer is contained in your supposition. If he admitted this was not fair and that he ought to have more money, I will agree with Mr. Trenholm.

Mr. Burgess: Well, you do not think that an engineer would be satisfied or properly paid if he only received \$2 in twenty-four hours, do you?

Mr. Sheean: I would have to know all about the opportunities that came to him in connection with that, immediately preceding and immediately following. There may be lapses of twenty-four hours in which nobody earns \$2, and yet his earnings in and about that work may be full, fair and correct. I could not segregate a particular part or any number of hours. As yet there is no guaranty that in any twenty-four-hour period or in all twenty-four-hour periods there should be a certain rate of pay.

Mr. Burgess: Well, assuming a case of this kind: An engineer on the Omaha Railroad is called to deadhead 100 miles; for that service he would receive \$2, according to the rule, would he not?

Mr. Sheean: That rule standing alone, yes. I could not say, I have not intimate knowledge of the individual schedule, as to whether or not there is any provision about coupling that up with any other service.

Mr. Burgess: Well, we will assume that there is not, because it was testified that there was not, on the Omaha.

Mr. Sheean: Yes.

Mr. Burgess: Now, then, if the engineer, as I say, was called to deadhead 100 miles, he would be compensated to the extent of \$2. If he did not get out for twenty-four hours, that would mean that he was paid \$2 for the twenty-four hours, would it not? That was all he was permitted to earn?

Mr. Sheean: I assume so, yes.

Mr. Burgess: Are you advocating that that is enough for the engineer to earn in that condition?

Mr. Sheean: Why, as I said, I could not tell without knowing what he earned just before and what immediately following

that particular twenty-four-hour period. I could not segregate that, except in connection with his whole work.

Mr. Burgess: That is all he was given.

Mr. Sheean: It is just like your endeavor to show that as to the first thirty minutes when a man goes down, before he makes a 200 mile run, is it fair that he should not be paid anything separately before he goes out on that 200 mile run? In trying to get the perspective as to what is fair to the engineer and fireman, I cannot segregate the first thirty minutes after he goes to work from any other period of the day, nor any particular twenty-four hours of his monthly occupation from other twenty-four hour periods, or other periods that are a part of his whole occupation.

Mr. Burgess: No, I would not expect you to do that, Mr. Sheean; but here is an engineer in through or irregular service, and he is called to deadhead 100 miles, for which, under the Omaha rule, he would receive \$2.00, and he is not given service for twenty-four hours. That would really net to him \$2.00, would it not?

Mr. Sheean: Yes. I do recall now, too,—I had forgotten all about it—that the Omaha was one of the roads which Mr. Trenholm referred to, I think, where a man would be guaranteed twenty-six hundred miles at the end of a month, no matter whether he ran them or not. Is not that so, Mr. Trenholm?

Mr. Trenholm: Yes.

Mr. Sheean: Yes. I do not care whether he has every twenty-four hours or not, as long as he has that monthly guaranty. I had forgotten all about that particular schedule. So that with the larger guaranty of his fixed monthly wage, if they deadheaded him and did not have anything for him to do, this mere \$2.00 item that you take out of the twenty-four hour period is considered with and is a part of the monthly guaranty that the Omaha gives that man. So that whether he runs them or not, he is paid for 2,600 miles.

Mr. Burgess: But that monthly guaranty does not apply to every engineer on the Omaha, does it?

Mr. Trenholm: It applies to all assigned engineers.

Mr. Sheean: All assigned engineers?

Mr. Burgess: I was speaking of an engineer who was not assigned. I am speaking of an engineer in the pool service.

Mr. Trenholm: They are assigned.

Mr. Sheean: They are all assigned.

Mr. Burgess: Then we will take engineers who are not assigned, extra engineers.

Mr. Sheean: On the extra board?

Mr. Burgess: Yes. Take the extra engineer. He has not had any work for four or five days. He is called to deadhead out to the other end of the road. Under the Omaha rule he receives \$2.00. He does not get any service for twenty-four hours. Now, do you think that is fair compensation?

Mr. Sheean: Not if that is the only thing he has in the month, no.

Mr. Burgess: That is all.

Mr. Stone: All he has in the month?

Mr. Sheean: Yes. He is calling an extra man who has not had anything to do for four or five days before. That matter simply illustrates what I was saying a few moments ago, or endeavoring to say, that in considering the deadhead rule or any other one of these rules, you must look at the entire schedule of the particular road, in order to ascertain whether or not it is essential that there should be a particular guaranty as to a particular part of the service, or whether or not it can be fairly made uniform as to all conditions.

Mr. Nagel: Mr. Sheean, where the rules now provide for compensation for deadheading, is that compensation an arbitrary one, or is it based upon the compensation to the engineers and firemen on the outgoing train, or is it based upon the work which the crew is to do on its return trip?

Mr. Sheean: Both. They are all considered. Ordinarily, however, of course, the mileage of the distance out would affect or influence the compensation. That is, it is either. In some schedules it is provided so much per mile, covering the distance that they go out. In others, one-half the rate if they are deadheading on passenger trains, that would give them the actual miles. For instance, if it was a twenty-mile deadhead trip, it would be less than if they deadheaded forty miles. In other words, the effort is made in deadheading to adjust that into the schedule itself, so as to cover and provide for headhead trips of different distances, contemplating both the time and the distance that a person may make in deadheading.

Mr. Nagel: Generally speaking, which is the better basis, the compensation of the engineers and firemen on the outgoing train which carries the deadhead crew, or the compensation which the fireman and engineer are to earn when they do their own work?

Mr. Sheean: Well, I think you have to combine them, Mr. Nagel. I think you would have to give consideration to that because it may be a quick trip out on a passenger train and a slow trip in, and in order to be perfectly fair about it, I think that consideration would have to be given to both. And the only thing, really, that the companies are most anxious to do here is to prevent this very thing, which is admittedly contemplated by this rule, 100 miles out and 100 miles back, no matter what the distance may be, and that at the full rate.

Now, Article 10 covers the proposal concerning hostlers. And I want first to call the attention of the Board to the argument made in the printed brief in support of this Proposal No. 10, page 44 of the brief.

My first impression is that through inadvertence there has been put into this part of the brief arguments which have been heretofore made in support of the proposal that firemen and engineers should be relieved of this work, and that through inadvertence they have advanced the same argument here in support of the same proposal, that the firemen and engineers should take over the work. And, as Mr. Higgins pointed out, how the firemen and engineers shall be relieved at terminals, a purportedly remedial rule on the Missouri Pacific was not, as he said, really a hostler rule, but was simply a rule to provide extra compensation for the engineers and firemen. So that on the Missouri Pacific, as he showed by the examples that he cited, this extra hour that the engineers got at these various terminals has the practical effect of making the Missouri Pacific pay a higher rate on competitive runs than was paid by other railroads which nominally had a higher mileage rate in their schedules.

At page 44, among the reasons advanced in support of the contention that the foregoing rules shall be awarded, are:

“1. The duties of road service of engineers and firemen are extremely arduous, and railroads should not require additional services of them.”

“(d) Clerks in offices and mercantile establishments have

long since been relieved of janitor's work; mechanics are no longer required to grind tools."

And yet the provision of this Article is that hostling positions shall be filled from the ranks of firemen. In other words, the proposition now made and now advanced is that the mechanic shall take over the grinding of the tools, and the mechanic shall take over the grinding of the tools, however, at the mechanic's rate of pay. Or following the simile, that the clerk in the office shall hereafter continue to do the janitor's work, but that he shall be paid therefor at the scale of wages fixed for the clerk.

Now, this proposition, baldly and boldly, is making a closed shop practically of the whole hostler proposition. "Shall be filled." "Hostling positions shall be filled from the ranks of firemen."

Again, through inadvertence, the brief at page 45 says that what they are after is that firemen and engineers should be given preference in the employment of hostlers by railroads. But that is not their rule. Their rule is that hostlers' positions shall be filled from the ranks of firemen.

Now, the first part of this paragraph is that at points where an average of six or more locomotives are handled within twelve hours, day or night, hostlers shall be maintained. All judgment and discretion of operating officials as to where hostlers shall be maintained, taken away from them. This provides just where hostlers shall be maintained. And with reference to that Article of the Proposal, during the conference between the two committees, a committee representing the railroads made the following inquiries of the committee representing the employes:

"1. How are the six or more locomotives to be determined?"

Answer to question one: "We contemplate that at points where, for any ten consecutive day period, an average of six locomotives are handled within any twelve-hour period, hostlers will be assigned."

And logically it follows that in order to discontinue the position of hostler the average number of locomotives handled within any ten consecutive day period must be less than six.

"2. Is an engine handled in and out during a twelve-hour period counted as one or two, for the purpose of this rule?"

Answer to question two: "Two."

“3. Can a hostler be assigned to duties other than hostling?”

Answer to question three: “We do not contemplate that hostlers will be assigned to duties other than that of handling locomotives, or other power, in and out of roundhouses, placing them at fuel sheds, sand houses, etc., for the purpose of having supplies placed thereon, supervising the work in connection with same, and taking them to and from trains.”

Now, Mr. Cadle stated very frankly that the matter of hostling engines differs widely in this Western territory. That there are hostlers who handle the engines at the pit, and supply them with coal and water and sand, and have the fires to clean, put them in the roundhouse, take them out, place them on designated tracks, and at some points a great variety of duties are performed by the men in connection with the handling of the trains. That fire knockers clean the fires and the ash pans, and that sometimes the hostlers will help clean the fires.

Then Mr. Clewer described the condition on the Rock Island, and Mr. Willsie described the condition on the Burlington, showing how on a single railroad, one railroad, there was of necessity proper differences both in the way the work was done and in the wages paid for it.

Starting on the Rock Island here with a busy terminal at 47th street, the intensified operation work permitted of the subdivision so that hostlers there did certain work, certain men did nothing in the world except just handling the throttle and making the movements. Subdividing the work down, all of this work of building the fires and cleaning fires and everything else done by different people down to the turn-table operator, who did that alone.

Then at the less busy terminals, how this work would be combined, and the one man doing not merely the segregated portions done at this busy point, but adding to that other work, until finally out at the small points where there are one or two engines handled, and where one man works perhaps a half an hour or an hour a day at that, making a short movement of the engines in connection with the entire work, building fires and cleaning fires and putting on the supplies and the coal and the sand and the water, and then when the engine is gone during the day, on those branch lines, running the pump, working

around the station or anything else, and drawing a monthly rate of wage. In other words, there is and can be no actual uniformity in this work through a territory as vast as this. In other words, the work that is done at the 47th Street round-house on the Rock Island is not in any way comparable with the work done at this little town of Bureau, I think, that Mr. Clewer referred to, no similarity in the work, and therefore no possible justification for the fixing of the standard or uniform rate of pay. Why? Because there is no uniformity in the work which the necessities of the business require, and no possibility of thus subdividing, specializing and intensifying the work, in the manner that can be done at the different terminals.

Mr. Carter gave us a definition here of a hostler—a man who at any time moved an engine under steam; and Mr. Cadle, under the proposal, says that a handy man hostling an engine at the terminus of a branch line, moving it under steam once or twice a day, would be entitled to a hostler's rate of pay, and any man who performs general work at an agreed monthly salary, at any time during his daily duty moves an engine under steam, would take this hostler's rate. And if in a single twelve-hour period there happened to be six engines at a particular point, that fact would establish that point for all time as a point where the company must maintain a hostler, which hostler, created under that condition Mr. Carter said could not be called upon to do anything other than to move an engine under steam. Those who are here now might be required to continue to do just what they are doing now, but a hostling position created by virtue of this proposed ironclad rule must be maintained wherever there are a certain number of engines, and he must be just a man who handles the throttle."

We file our form 42, containing general information as to how widespread are the duties at these different points. How in the world can you make a standard rule applying to the terminals here in Chicago, on the Rock Island, and at the same time apply fairly to the situation at Bureau, where they handle one or two engines a day, or how can you make a rule of uniform application that is fair to the situation here in Chicago and equally fair to Pocatello, Idaho? That is something that passes comprehension, in view of the diversity of conditions shown by this form 42.

I think the record here discloses the real purpose of this.

Here is the argument, in years past, as Mr. Higgins pointed out, apparently or nominally an engine shall be handled at terminal points by hostlers; but in reality as he said, although granted as a remedial measure, is simply worked out to be a special provision for handling under pay, by the engineer and fireman, the engine from roundhouse to depot.

In other words, in a different guise, in case they should not get it under this proposed terminal delay, where their so-called terminal delay segregates from roundhouse to outer switch a special part of the day's service, any such rule as this would accomplish the same practical result of calling for additional pay.

There is a very interesting question here that I do not want to discuss at length, because it is so clearly set out in the record itself. I call attention in the brief to the particular pages showing the colloquy between members of the Board, as to the practical result of this and the real purpose and object of it. The Chairman asked the question:

"Is there anything here which would enable the railroads in the future, if they so desired, to take some worthy man who was in the mechanical department, and use him as a hostler?"

Mr. Carter finally got to the position that even though this man was a machinist, and had been experienced in the building of locomotives, and knew all about them, knew how to handle them, and the railroad company wanted to use him as a hostler, they could not do it unless he had previously served as a fireman, and that hostling positions shall be filled from the ranks of firemen.

Now, as I say in my brief, there has been a lot of loose talk about employing "competent" men as hostlers, and apparently the implication or suggestion is carried through here that the mere fact of a man having fired an engine per se qualifies him better than some other man who has come up through the machine shop or roundhouse for the position of acting as a hostler. There is not any suggestion here of subjecting them to any examination, or anything of that sort that would leave it equally open to all other people; but per se they are to be recruited from the ranks of firemen.

It is a very significant fact that the only two simon-pure hostlers called on the witness stand here had never served as

firemen. There were certain men who testified, who at times were firemen or engineers, and had in the matter of seniority bid in hostling positions at different times; but we had just two real hostlers, the man from the Burlington, Mr. Holloway, and Mr. McClory, of the Chicago Junction. Mr. McClory had been a machinist's helper on the Chicago & North Western, and as a machinist's helper he had learned how to run an engine. Mr. Holloway, called also as their hostler witness, worked around and about the roundhouse, came up from the position of hostler's helper, and is now a hostler.

Mr. Holloway and Mr. McClory are the only two hostlers called here, and neither of them is eligible for this position, if this proposal is agreed to.

Mr. Carter admitted that, under the constitution of his organization, these men were qualified to become members of that organization, but not qualified to take the position of hostler under the rule here proposed.

We wish the Board, in considering this question, would go over this and consider seriously the colloquy that arose here as to the real purpose and intent of this article. It is to lift men out of their jobs. There is not any question about that. There is not the slightest question in the world that it is for the purpose, object and intention of closing, for all time, to all the railroads in this Western territory, the right and privilege of doing what both Mr. Willsie and Mr. Clewer say has been done and is being done. It closes for all time the provisions of these schedules, which many of them have, that disqualified or injured engineers or firemen may be used to fill the position of hostlers; because seniority governs, if this proposal goes into effect, and the disqualified engineer taken irrespective of seniority and given the position of hostler in the yards, is done for, for all time, in case this is seriously considered. That has been gone into by members of the Board. I simply want to ask them to hark back in their conference to the colloquy between members of the Board and Mr. Carter, and we ask that no Award be made upon this question of hostlers that shall close for all time these possible avenues to these roundhouse employes, and those who come from the machine shops.

Mr. Shea: Mr. Sheean, how many roads are there now in

the Arbitration that have rules filling the positions of hostlers from the ranks of the firemen or enginemen?

Mr. Sheean: Perhaps Mr. Keefe can give me the number; but so far as I know there are no roads that are doing so under the modern definition of a hostler. Mr. Trenholm well called attention to the fact that for many, many years they had a provision in their schedule for filling hostlers' positions; that they had these provisions in both the engineers' and firemen's schedules; but until this recent new attitude that went to Dr. Neill for interpretation, nobody on the Omaha Road had ever claimed that the handy man at an outlying point where there is one engine, was included under that schedule provision. Hostlers, as interpreted in these schedules, and as understood by the men upon the different roads, have meant the men at points where the work was so intensified that there could be assigned and were assigned men who devoted substantially all of their time, where the business was such as to justify and require and enable the railroads to employ men who devoted all of their time to this work. But I know of no railroad in the Western territory, which has handy men at these outlying points and on branch lines, where the hostler, as defined by Mr. Carter as being a man who at any time moves an engine under steam, is recruited from the ranks of the engineers and firemen. I do not know of any such road in the West, Mr. Shea.

Mr. Shea: Are there no roads in the movement which have rules which provide that these positions shall be so filled?

Mr. Sheean: I remember particularly that Mr. Trenholm said that in both the Engineers' and Firemen's Schedules on the Omaha Road, it was provided that hostling positions shall be filled in this way; but hostling positions, as construed by the men who made the schedule and by the men who operated under the schedule, have always been understood to mean hostlers at the busy points where men who devoted practically all of their time to this work were thus recruited. (Addressing Mr. Keefe) How many are there?

Mr. Keefe: There is no compilation. This simply gives the rules on each road, at page 300—all of the roads, and all the rules they have for hostlers.

Mr. Shea: I thought you knew how many roads there were?

Mr. Keefe: There has been no compilation made of that.

Mr. Sheean: They are all set out at page 300.

Mr. Carter: I should like to call the attention of counsel for the railroads to the testimony of Witness Cochran, from the Great Northern Railroad. He evidently has forgotten the testimony of Mr. Cochran, that only men who are capable and competent are permitted to handle engines on that road, and all hostlers are paid as hostlers when they are taken from the position of firemen.

Mr. Sheean: In the Eastern Firemen's case, the Board was not asked to lay down any rule as to the points at which hostlers shall be maintained, or to prescribe specifically that hostlers' positions shall be filled from the ranks of the firemen, as is here done.

The Board was not asked to lay down any rule as to the meal hour in the Eastern Arbitration, although there is but six and one-half per cent of the mileage in Eastern territory that has any meal hour fixed for hostlers. The Board in that Arbitration, however, was asked to accept a definition there proposed, a definition substantially the same, as Mr. Carter now says, is the real, proper and true definition of hostler. But no such definition was made in the Eastern Award, and we have filed here with the Board a copy of the rulings of Dr. Neill, as to the application of the Award in the East. The Award in the East simply was, hostlers per day of ten hours or less, \$2.40; which, by the way, compares with the suggestion that is made here. That award further provided:

"If hostlers are employed in handling engines between passenger stations, and roundhouses or yards, or on main tracks, they will be paid, per day of ten (10) hours or less, \$3.25.

"If men are employed to assist hostlers in handling engines between passenger stations and roundhouses or yards, or on main tracks, they will be paid, per day of ten (10) hours or less, \$2.50."

I simply want to direct attention to the amount awarded in the East. I want to direct attention to the claims made, irrespective of the definition of hostler, and most respectfully suggest to the Board, that after reading this colloquy between members of the Board and Mr. Carter, as to the real intent and purpose of this request, this Board decline to make any ruling which

must result eventually in closing to the shop and roundhouse force the possibility of securing employment in the positions in which, according to both Mr. Willsie and Mr. Clewer, on roads where they are recruited from roundhouse ranks, the work is competently and well performed.

Mr. Park: Mr. Sheean, I should like to ask if the Omaha Road promotes hostlers in the order of their seniority in the ranks of firemen or enginemen, or if they are privileged to take those who are incapacitated, and choose them as they see fit, for that service.

Mr. Sheean: What are the facts, Mr. Trenholm?

Mr. Trenholm: As I recall the rule in both the Engineers' and Firemen's Schedules, it is that—

“Engine dispatchers' positions are to be filled from the ranks of engineers or firemen who are eligible to promotion to dispatchers, eldest engineers or firemen to have the preference.”

That rule has been in the schedule for a great many years. The custom has grown up that in slack times the firemen make application for the despatching jobs, which pay, as I recall, \$2.95. They prefer road work when they can get it, and as soon as business picks up they immediately exercise their seniority to go back to the road again. That caused so much trouble at one time, a few years ago in some of the busiest terminals, where men were exercising their seniority to be dispatchers in the slack time,—and then as soon as they became familiar with that and of some value to the railroads, business would pick up and they would all want to go back on the road again, so that we were changing dispatchers continually—it resulted in my issuing an order that men bidding in under seniority rules the right to the despatching job, must take it for three months, as I recall it, so that we would not be continually changing men.

Mr. Park: Then in case they did not elect to take those positions, did you employ roundhouse men as hostlers?

Mr. Trenholm: We employ anybody as hostlers. The first opportunity is given to the firemen or engineers to bid in the positions. If they do not want the position, if business is good on the road, then we employ anybody we may elect who is competent to do the work, roundhouse men or anybody else.

Mr. Park: So that even with this rule on your road, the door is not closed to roundhouse men?

Mr. Trenholm: We do not so consider it.

Mr. Sheean: Your rule says that you shall give preference to engineers and firemen.

Mr. Trenholm: Yes, and we never have had any objection from the men to assigning an engineer or a fireman who had become disqualified through any misfortune on the road, or incapable of doing road work—I have never heard of an objection from the men to putting that man in as a hostler, to take care of him.

Mr. Park: Although you might technically be charged with a violation of the schedule?

Mr. Trenholm: Yes, I think we might be possibly, technically.

Mr. Sheean: Article 11, Surprise Tests, I can dispose of very rapidly, because the attitude of the Conference Committee is shown in the reply that we have always made, that properly conducted efficiency tests are necessary to safe operation, and should always have due regard to the safety of employes. Beyond the statement of this principle the schedule should not make specific provisions concerning tests. That is the attitude of the Conference Committee.

After all the talk we have heard here about endangering life and limb, it is rather startling, if your Honors please, to find that in this record of 7,300 pages, there are just two witnesses called on the proposition of knowing anything at all about any surprise tests. One of them is Mr. Modenbach of the Rock Island; and I do not intend to dwell at any length upon his testimony, because the engineer with whom he said he made the run, and whom he said was injured in the occurrence, took the stand and denied that there was any such occurrence, that any such thing ever took place, or that he was ever injured.

The other witness was Mr. Young, and Mr. Young of the Union Pacific was asked these questions by Mr. Stone, on direct.

“Mr. Stone: Have you ever had any switch lights turned red in your face?

“Mr. Young: Yes, sir.

“Mr. Stone: I wish you would explain to the Board how it happened?

“Mr. Young: The light was not turned red in my face, but it was left red. One night at New Cambia, I was on the

fast passenger train, it was about some time in March, 1913, and another one at Salina, this same spring, a red switch was turned.

"Mr. Stone: This one at New Cambia that you speak of, was the light turned completely around there, turned red?

"Mr. Young: No, it was turned a little bit crossways, so it could not be seen as far as it should have been, due to having been hung on one socket, by one fork of the stand, which would allow the wind or the weight of the lamp to swing it around perhaps a little bit, or enough to get it out of focus."

On cross-examination he was asked:

"Mr. Sheean: So that in both instances as far as the eye could see, the light was turned at danger?

"Mr. Young: Well, as soon as I could see it, the one at Salina was in good condition, and I saw it a long ways; it was a good light and well turned, and parallel with the track.

"Mr. Sheean: And as far as your eye could reach there?

"Mr. Young: Yes, sir.

"Mr. Sheean: You could see the red light?

"Mr. Young: As soon as I got the location.

"Mr. Sheean: In the other instance, the track itself was straight for a distance of at least two miles before you approached this place?

"Mr. Young: Yes, sir."

Now, that is the only testimony in this record about the endangering of life or limb, if we exclude the testimony of Mr. Modenbach, which we thought was worthy of being run down to ascertain whether in truth or in fact there had ever been an occurrence here within the last three year period, in which anybody's life or limb was endangered in any manner.

At one time when it was suggested that all this proposal contemplated was the actual abolition of tests that were dangerous, I stated of record here, and now reiterate it:

"Let me say here and now, if the organizations, and I know, while I am speaking hurriedly, that I am speaking with authority, if the organizations will say that what they mean by surprise tests are really tests which endanger men's lives, we will here and now agree to read into the Award by agreement, that surprise tests thus defined shall be discontinued. Now, if that be the definition of surprise tests, the matter is ended."

Mr. Stone replied:

"Mr. Chairman, this is neither the time nor place to throw a life-line to the Conference Committee of Managers. That all went over the dam long ago and is before this Board for decision."

And in view of the fact that one of the practices that they proposed to eliminate is the wiring down of automatic signals to "proceed" position, and in view of the fact that developed here, that this was manifestly inspired, not because of any danger encountered by engineers through these tests, but because on the Santa Fe a trainmaster penalized certain engineers with reprimand for failure to observe that the signal did not go to stop position upon their engines passing—that, manifestly, is the reason for the insertion of the request for this rule. Now, having stated our position, if this Board wants to take the responsibility of prescribing for operating officials just the specific thing that they shall or shall not do to ascertain and determine whether or not their employes, responsible for life and limb of passengers, are diligent and watchful in the performance of their duty, our committee have as we believe done our duty in stating our position, and passing to the Board the responsibility which this committee were unwilling to assume.

I will treat Articles 12 and 13 together, and I am going to finish by adjournment at noontime without any question. I made that promise, and if I am not through I will stop.

Articles 12 and 13 propose assistance for firemen, in Article 12, one, and in Article 13, two firemen.

In the Eastern Firemen's Arbitration, practically the same request was made as to assistance for firemen on all engines in through freight service where but one fireman is employed, and on all through engines in passenger service coal will be kept where it can be reached by the fireman from the deck of the locomotive.

The Eastern Board declined the award.

They also proposed in the East two firemen on coal burning engines weighing more than 200,000 pounds on drivers. The Eastern Board I think recognized the position that is taken here, that mere weight on drivers cannot determine the necessity or lack of necessity for two firemen upon engines. They may or may not be required. It is shown here that in the West and in

mountain territory, on two railroads, on a particular type of engine on one, they do now make provision for relieving firemen, on the Mallet engine I think it is, on the Great Northern, and on a certain type of Mallet engine on one district of the Santa Fe Railroad.

The Award in the East provided that when a second fireman is deemed necessary on any engine, or assistance is deemed necessary on engine where one fireman is employed, the matter will be taken up with the proper officials by the Firemen's Committee, and on failure to reach a settlement, the matter must be referred to arbitration. That, in other words, recognition was there given to the fact that mere weight on drivers, irrespective of topography, irrespective of climatic conditions, irrespective of a great variety of things that may enter in and form a part of the determination of the question of physical endurance, of ability of one man to perform the work, must all be considered together in determining the question whether two men are or are not required upon any particular type or style of engine.

Now, in order that we might ascertain here really what necessity there was for any rule here that coal shall be kept where it can be reached by the fireman from the back of the locomotive, or the other proposition, of having two firemen, a number of observations were made endeavoring to ascertain just what conditions were upon these larger and heavier types of engine.

Now, Mr. Tollerton summarized these various operations, and the length of time taken in the actual shoveling down of coal on these largest and heaviest types of engines was less than one per cent of the time, treating the observations as a whole on the hardest operating divisions of all this Western territory.

Now, of course, the length of time that is taken by a fireman in the actual performance of the physical portion of the work of shoveling coal never has measured his actual compensation, or his actual work, and while there has been an effort made here to try and interject into Mr. Tollerton's testimony the theory that he was trying to prove that these men were "loafing," I think that is the way one of the questions was put, Mr. Tollerton stated repeatedly that he did not wish it to be inferred from his testimony, that he did not wish it to be understood that he considered that the fireman was not doing his

duty at all times, the same as the engineer. But his intention was to show by his testimony that on these locomotives where they are asking for two firemen, the work is not beyond the capacity of one man. Again, he states that he considers that the engineer and fireman are working all the time. Again and again the same statement is made.

We call attention to the fact, in our brief, that practically all of the railroads in Western territory now have by schedule provision agreed that coal of the proper size for firing purposes will be placed on the locomotives. They do not do that in the East, at least their schedules do not so provide, I mean to say. Coal for proper firing, as called for in this proposal, is already in practically all the schedules of the roads.

The other part of this request was specifically made in the Eastern Firemen's Case and was denied.

Article 6 of their request contained the request for assistants for firemen on all engines in through freight service where but one fireman is employed, and that on all engines in passenger service coal will be kept where it can be reached by the fireman from all the decks, but was not contained in the Award, although specifically requested. Mr. Tollerton pointed out that the place where this would bear down with greatest severity upon these Western roads was on the small, old style engines on the light branch lines, where the distance from the deck back to the coal space is greater than on the more modern engines, and that this hard and fast rule would weigh with greater severity upon the particular type and style of engine where there has never been any real suggestion that the fireman was overburdened physically on account of the labor that he was called upon to perform.

Now, there is no contradiction of the testimony as to the constant improvement in the style of tenders, the installation of coal chutes, whereby the coal is generally within the reach of the fireman. Mr. Trenholm specifically stated that since 1910 there was a very great improvement, rather than any backward step in the matter of coal being accessible and within the reach of the fireman.

Now, upon this proposition, on the amount of physical work that is actually done upon these larger engines, it seems to me, that Mr. Lauck's statistical figures here are very markedly

corroborative of the conclusion drawn from these 2,000 observations, as to the length of time. It is intermittent service, it is hard work, but Mr. Tollerton shows that of all the time of actual physical effort, only about 23 per cent of the time of the fireman on the heavier type and style of engines was he engaged in physical shoveling of coal, or other physical labor.

Now, I called attention yesterday to the fact that the total coal consumption figures, as submitted by Mr. Lauck, drawn from the Interstate Commerce reports from all of the railroads, all of the coal burning roads, shows that in 1909 the railroads in Western territory were paying one dollar for each 2.28 tons of coal shoveled in their locomotive department, in their transportation service. In 1913, the fireman was shoveling for each dollar of compensation 2.18 tons of coal. In other words, for the actual physical work of the shoveling of coal, railroad companies paid to their firemen in 1909 about 44 cents a ton, and in 1913 about 46 cents a ton.

Now, the testimony here is that the mere shoveling of coal, the mere physical work of doing that is paid for at the rate of from 7 to 9 cents a ton. In other words, the firemen, for the mere physical effort of shoveling coal here are paid 46 cents per ton in 1913, as against 7 to 9 cents per ton which is paid common labor for the mere physical work of shoveling coal out of a box car or out of a coal car. In other words, there always has been recognition of the fact, as Mr. Tollerton gives recognition here of the fact that the fireman has duties other than the mere physical labor of shoveling coal, and this investigation was conducted for the purpose of ascertaining, and only for the purpose of ascertaining, whether there was in truth and in fact a basis for the claim that the physical effort required of him had reached the limit of human endurance, or whether it was beyond the capacity of one man to do the work upon the engines which weighed more than a certain amount on drivers.

Now, we frankly recognize the fact that particular engines on particular runs may justify and require relief. It is not and cannot be made dependent upon the mere fact of a certain weight on drivers, irrespective of the greater length of the run, of the tonnage hauled, the quantity of coal that may be consumed, the interruption or continuity of the service, the speed at which the train operates, and whether it is in the desert terri-

tory, hot weather—all those things must be considered. Whether the feasible way of adjusting that is doing as is done on some runs in the East, and doing as is done in some places in the West, a split trick, namely, a fireman firing only half the distance that the engineer takes on his run, but getting the minimum rate of pay, or whether the feasible way is providing a second man on the engine, or what should be or what should not be done, should be taken into consideration. All of these things that enter into the question of the feasibility of the fireman upon a particular run doing the work should be taken into consideration, considering how arduous the work upon that particular run may be.

Now, having declined to provide in the East that a second fireman should be provided, simply because of a certain weight on drivers, and leaving it for adjustment in each particular case and requiring the railroad companies to submit to arbitration any time that the men asked and were refused a second fireman—

Mr. Nagel: Mr. Sheean, do you approve this disposition which the Eastern Award made of that question as to the employment of a second fireman?

Mr. Sheean: Why, that, or substantially that, that is as to the detail as to just how the Board of Arbitration should be created. I approve thoroughly of a suggestion or a disposition of it whereby the men on any division who think a second fireman should be provided over a particular run should have the right to take that up with the management and compel the management to submit that question to arbitration, if they could not agree on it, yes.

Mr. Nagel: Well, now, we are a quasi public body here?

Mr. Sheean: Yes.

Mr. Nagel: Do you think we have the right to delegate the authority to arbitrate a particular question by providing how it shall be settled and how the arbitrators shall be selected?

Mr. Sheean: No, that is what I say. I did not mean as to the detail, but that is why I qualified it in the way I did, some method by which each particular situation—that the mere say so of the railroad company that they declined to do it at a particular place should not necessarily be conclusive upon the management. My suggestion in this particular connection would either

be the right to have this Board pass upon any particular individual case, or this Board could, as a part of its award, conceivably create a permanent committee consisting of representatives here of the railroads involved, in case of disagreement with the local management, whereby a committee here appointed might conceivably be created as a permanent board. That has been a matter which has been sometimes considered.

Mr. Nagel: I do not state it as a conclusion, but the question arises in my mind whether we have the right to refer a question for decision. Of course we might say as to all sixteen demands that conditions are peculiar, and we refer them back to the railroads and the men for settlement among themselves. That would be a very easy way to dispose of all the questions.

Mr. Sheean: Yes.

Mr. Nagel: The force of circumstances and local conditions have been suggested again and again with respect to many of these demands, just as it has here. Now, have we a right to say that the question as to the necessity of a second fireman shall be submitted to representatives of the roads and representatives of the men, and in case they do not agree, a further arbitrator shall be selected in a particular way?

Mr. Sheean: Well, I have never given any thought to this question that you suggest, arising from the rule, that a delegate is without authority to further delegate authority.

Mr. Nagel: We have the right to decide, but have we a right to appoint somebody else to decide?

Mr. Sheean: Well, conceivably not, but I think there could be no question—I am talking now, of course, just as a matter of first impression—I think there could be no question of the absolute legality and strict legality of a provision whereby, in case the men upon any particular railroad were unable to agree as to the necessity at a particular place, of having that question submitted to this Board for specific adjudication.

Mr. Nagel: Reserving the decision.

Mr. Sheean: Yes, as a matter of first impression, I should think there would be no question of the strict legality of that, that if the conclusion was reached that you could not, by any hard and fast rule here, or merely because of the weight on drivers, reach a uniform conclusion, but that the situation might present that concrete question on a particular road, that, failing

to agree with the management of that road, that question could be passed upon by this Board.

Mr. Park: After a year, would they have any authority to pass upon it?

Mr. Sheean: Let me have the contract, please.

Mr. Stone: Mr. Chairman, while he is looking up his contract, I am not thinking about what we can do after the year is out, but in view of the fact that there are about 5,000 of these engines that would come up for discussion, I am wondering if the Board would not be in session most of the time.

Mr. Nagel: Most of these Arbitration Boards seem to have a life job, if I am to judge by the manner in which they have been conducted.

The Chairman: I have a life job which requires me to be in Richmond and Asheville. You will have to come to Richmond or Asheville to see me.

Mr. Sheean: I would like to ask Mr. Carter how many disputes or requests have actually arisen in the East under this matter?

Mr. Carter: I do not know the number of them. I do know that wherever the question came up they had great difficulty in reaching the conclusions, except, perhaps, we got a settlement. I think, on the B. R. & P. without any great difficulty. I will say that the principal objection in the East is that they reduced the wages so much where there were two men on an engine. For instance, it was a \$4 engine, and they gave the fireman help, and they penalized him by taking \$1 off his wages, and the fireman resented that.

Mr. Sheean: I was just going to call attention to that. The Eastern Board provided:

“When two firemen are employed on a locomotive as a result of the application of Article 6, hereinafter, the rates of pay to each fireman shall be as follows:

Weight on drivers, 100,000 up to 250,000 pounds, \$2.75; weight on drivers, over 250,000 pounds, \$3.00.”

That is, they fixed as a part of the Award that when you put the two firemen on the engine, each of them would get the minimum rate of pay in that class of service.

Mr. Park: That is on the theory of increased productivity.

Mr. Sheean: No.

Mr. Park: That is, they are not producing as much, and they reduced their pay.

Mr. Sheean: No, it may be either upon that, or upon the theory, Mr. Park, of relieving their work, that where one man on this scale of pay—you can see just what the practical effect here would be, turning to Article 2 of this proposal: 170,000 to 200,000 pounds on drivers, \$3.40 for the fireman. Now, one fireman there at 184,000 pounds on drivers is getting \$3.40 for firing that engine weighing 184,000 pounds on drivers. But Mr. Carter says that this proposal says, as soon as it goes to 185,000 pounds or over you put the two men on and pay each of the two men. And as you paid the one man for doing all the work, you do not necessarily get to the question of productive efficiency, and the Board might, very legitimately reach the conclusion that when a man is kicking, not because of his pay, but purely because of his work, and the relief is granted on the theory that we cut that work in two, really relieving him of part of this work at this point, therefore this work which has heretofore been done by one man is divided in two, and each of the men only does half of the work, and the pay that each man gets in that situation shall be the minimum rate of pay in through freight service. That is what the Board did there.

Of course, it is significant in this connection, I think, that the Board in this Eastern case reached this conclusion. And it seems to us the same line of reasoning should apply with reference to oil burning engines, that when you relieve the man on the oil burner of the physical work that is attendant upon the operation of coal burning engines, that his rate of pay logically should be the minimum rate in that class of service. But this agreement seems specifically to provide that any difference arising as to the meaning or the application of the award made by said Board shall be referred back to the Board for a ruling thereon, and must be done at the request of either party. So that I think there would be no practical difficulty in the matter of passing upon particular situations.

I am glad to learn, which I suspected would be the case, that when an award was made, if it got to a point where one man could not do the work and you relieved him of that work by putting two men on, but in recognition of the fact that, having relieved him of the work, that a part of the pay predicated on

his doing all of this work should suffer, not a complete reduction, but should suffer some reduction, I mean by comparison with the man that did all the work, not reducing it below the minimum in that class of service, that there probably would not be very much question arise of wanting two firemen. In other words, if, in fact, two firemen means that each of these firemen doing only half the work that they did before are to get only the rate of pay which is paid the men on the lighter class of engines, it is not apparently a matter that they are very much interested or concerned in. They can still continue to do the work, I judge, if it has not caused any referring back to the Board or requests upon the roads.

Now, Article 14 covers the subjects of cleaning locomotives, setting up wedges and placing supplies upon locomotives.

There was not any testimony on behalf of the employes where any engineer or fireman is called upon to clean engines. Mr. Tollerton said that he saw no reason, on certain branch short lines, where you could not get anything resembling either 100 miles or 10 hours, one or the other, in actual work from either engineer or fireman, why there should be any particular objection by the engineer and fireman as to any of this class of service, at least contributing toward the making out of the minimum day that is paid.

It is all work that has, in times past, been done by engineers. Mr. Young, in telling of the development of the statements in the Western territory upon the Union Pacific, very frankly stated that in fixing the rates that have been made during all the years he has been employed on the Union Pacific, such rates have always included the time from the time the man went to work until he got through, and that engineers have been relieved of considerable work, such as filling grease cups and taking care of the lights. And the question was asked by Mr. Nagel as to whether or not the men objected to doing it without extra compensation, and I think it was clearly developed that the work, particularly this setting up of wedges, they all agreed must be done by a machinist or engineer, and the engineer is perfectly competent to do it, every one admits. But under this proposal, you will note that they must be relieved of it at all points where roundhouse or shop force or an engine watchman is employed.

Everybody agrees that the engine watchman is not compe-

tent to do that work, and of course the engine watchman would be at these little outlying points on the branch lines, where Mr. Engineer, working perhaps three hours a day all told, and yet getting his 100 miles a day, would get this extra perquisite. He would have to continue to do this work. The rules of shop craft, on some roads at least, provide that only a machinist or engineer shall do it. The engine watchman could not do it, so the practical result of granting this would simply be that on these short branch lines where any part of this work is really only utilized now for making up the minimum day, it shall be added onto the perquisites or shall really increase the minimum day. That is the practical effect of it.

Now, I think we have all at times lost sight of the fact how in arbitrations of wage movements these conditions in congested yards like Chicago, and the amount of tonnage that is hauled in a district justify an increased rate of pay, made of universal application, as spread out over these small branch lines where traffic is light and work is light, and how the practical operation has been, by the description of these tonnage operations upon the main line and how big engines have come in—that has been utilized for the purpose of making a general increase of wages. And I do not want this Board, when it retires, to lose sight of the fact that, notwithstanding all this talk about the big engines, the branch mileage in all this Western territory is a very substantial part. Almost 40 per cent of the entire mileage of this entire Western territory is made up of these branch lines serving these communities, and the smaller and lighter power therein installed, where the actual service and needs of those local communities must be provided for in schedules and in operations which require, perhaps, a long spread in hours but light work in between the actual work of engineers and firemen, where neither the hours nor the miles are made by the engineer or fireman, and where none of the work that is done here by any of the railroad companies has been shown to be burdensome or improper or unfair.

Now, I think it is made perfectly clear that this matter of the setting up of wedges is something that can only be done by a machinist or by a locomotive engineer. Under the schedules and under any award that might be made here, by which an engineer would be paid from the time called for duty until

finally relieved, he would be paid for the work, which is a proper part of his work, or any of this other work he might be called upon to do. And it is only for the purpose of the final wiping out of the possibility, no matter how short the time, how short the miles, of asking an engineer or fireman to make some contribution towards the minimum day that he is paid and must be paid under the schedules, and which is not obtained and cannot be obtained by the mere running of the engine on the road.

Now, as to the official weights on drivers, proposed by Article 15, there is really no objection upon the part of the Managers' Committee, wherever the rates are in any wise dependent on the weights on drivers, and in view of the fact that at the present time in all the Western territory, all the schedules of both engineers and firemen take a certain rate at 215,000 pounds, there is, therefore, good reason why there should be some satisfactory method, any method that is satisfactory to the men. If they prefer the bulletin to the stenciling, or any other method, they have the right, of course, freely conceded to them, wherever any rate is in any wise dependent upon weights on drivers. The information that the company has, the historical weight, and, as pointed out, no railroad company in the Western territory, with one exception, I think, I believe the Canadian Pacific, is able to weigh its engines, but no other road in the Western territory is able to do so; and the accepted weights or historical weights, is a matter as to which the companies can have no objection, and they have no objection, insofar as rates are dependent on weights on drivers.

Now this last proposal, Article 16, reads:

"Engineers and Firemen will not be required to throw switches, flag through blocks, or fill water cars."

I will pass the water cars, because we did not hear anything about it in the testimony, as to what they wanted to be relieved from or what was required from them.

The throwing of switches and flagging through blocks which is shown here would affect the Western railroads to the extent of \$80,000 a month. We had only three witnesses who testified on this proposition on the part of the employees. One was a man on the Burlington, who told about the passenger fireman getting out at Savanna, on the run out there and having to throw the switches on this passenger run between the depot and

the roundhouse, where he took his engine. Also, certain suburban passenger firemen having to throw a switch after they passed the outer switch and into the yard; there was an intermediate switch between the outer switch and the roundhouse. Then a fireman on the Chicago & Western Indiana told how, at the roundhouse out here at 83rd Street the engineer and fireman took the engine in the morning and went down to South Chicago with it, where there is a yard of the Chicago & Western Indiana at South Chicago and the yard crew reported at the yard at South Chicago, and Mr. Fireman threw the switches on going down to the yard in the morning.

Engineer Jones of the Southern Pacific also testified—and strange to relate, Mr. Jones testified and gave as a reason, back in Article 2, why helpers and pushers should receive through freight rates, that the helper and pusher engine did not have any flagman and they really have to do that work in pusher and helper service.

Now, in the brief which Mr. Carter filed in the Eastern Firemen's Case, asking under that article that pusher and helper service should receive through freight rates, he gave as one of his important reasons for that suggestion why they should be put upon the basis of through freight rates, that the pusher and helper fireman is required also to perform the duties of flagman or brakeman, there being no conductor, flagman or brakeman on a pusher or helper locomotive.

That is admitted to be the fact. Here in this Western territory these pusher and helper engines described by Mr. Trenholm come down from the roundhouse, and in order to get on the front end of the passenger or freight train, as it may be, they throw the switches, the fireman has to throw the switches, and then they drift down the hill and in getting off of the main line they may have to throw the switch again. That is why it runs to \$80,000. By examining our Exhibit 3, it is shown that the people who would be affected by it in this single month are the pusher and helper people, where it is shown that the highest paid people in the employ of the railroad companies, taking them as a class, the highest paid are these men in assigned pusher service. And now having obtained this high rate, among other reasons assigned for the high rate in past arbitrations having been that it is part of the pusher and helper duty for the fire-

man, either to get off the engine when he is getting off the main line and throw these switches, a regular part of the duty of the helper engine, getting their rate away up so it brings over \$200 a month to the assigned engineer, having got it up there, they say, "Now that we have got the rate fixed on the idea that that is part of our duty, now we will have a rule provided that lops off that part of his duty and his work.

Now this exhibit shows the railroads that are affected, and the amount which is involved in a single month, where the pusher and helper service is installed. You will find it is to mountain roads where pusher service cannot be escaped, and where the only way it could be relieved would be to put a third man on these passenger locomotives. And we submit there has been no justification offered in the testimony for a change in practice in pusher and helper service.

Now, before concluding, I want to direct attention to the fact that the railroads here have endeavored to present to the Board in the most accurate and reliable manner that we could conceive of: First, what the men were getting; secondly, what the proposals meant; and that after a submission to the men and their corps of experts, of the figures, both as to payrolls, as to time slips and train sheets on which our estimate of increased cost was made, that no witness has been placed upon the stand to question either the accuracy of the application of the proposal or the accuracy of our payroll exhibit, which takes every man in the ranks of engineer and fireman who did any work on an engine during the month in which the proposal was made, and gives his name, gives his detailed earnings, reduced down to as low men as less than \$1 earned in the entire month.

We show in that, that taking these Exhibits 26, 27 and 28, giving all the details, and summarized in our Exhibit 29, and counting all extra men, regardless of the length of time that they worked or how much they earned, regardless of whether they were available or not available, and excluding only those who were affirmatively shown to have laid off to such an extent that their earnings fell below \$100 as engineer and below \$70 as road fireman, and showing the entire 25,043 engineers, and averaging the entire 25,000 of them, their earnings for that month were \$160.99. Of these engineers, 5,646 of the passenger class averaged \$180.39; 8,984 of the through or irregular freight class

averaged \$163.68; 3,390 of the local or way freight class averaged \$166.88; and 5,213 of the yard class averaged \$129.86. Those are the engineers.

Of the 24,279 firemen, the average monthly wages of this total number of 24,279 was \$100.63. Now we have divided these into classes in this exhibit, showing how many fall within these breaks, that would make \$100 a year difference in their yearly compensation.

Mr. Trenholm presented in our Exhibit 42 the actual payroll figures for a year of over 5,000 men. Those men show in every class of service on every operating division on every railroad in this movement.

How far representative? Why, granting, if you please, and it is not true, because it is shown here by the payroll figures as shown for the entire year, only 16 per cent of those shown for the entire year got their highest earnings in the month of October, 1913, only 16 per cent of these men that they say are the high men, these 5,000 men had their highest earnings in the month of October; but granting, if you please, that they were selected as the high men in the particular class of service, they have shown a man or men on every division of every railroad in every class of service.

How far representative are these figures? Why, our Exhibit No. 30 shows that 60 per cent of all these employes, excluding the entire through freight service, are on assigned runs, not varying from day to day, not affected by fluctuation of traffic. Sixty per cent of all the service on assignments that are fixed by regular schedules, wages not affected by the fluctuations of traffic. Of the through freight service, it appears that there is over 5 per cent of the total service, the 40 per cent would remain, and the reduction would be 5 per cent more, if we take into consideration the fact that in through freight service there is five per cent of the total service made up of assigned runs. That is all through freight service. Is not this irregular, catch as catch can, but is made up of what they call their red ball or through freights, that run at exactly regular times, irrespective of the fluctuation of traffic, whether they have tonnage or have not tonnage those through trains must go. So that in the end, we get down to the question of less than 35 per cent being in any wise affected by any fluctuation. And there what do we find?

This 35 per cent that could be affected in any way, covered by agreements, under the joint agreement between these two organizations, that no reductions will be made in the boards that man this service, so long as those in pool or chain gang service are averaging the equivalent of 3,000 miles per month, or, on the extra road list are averaging the equivalent of 2,200 miles per month or those on the extra list in switching service are averaging as much as 22 days per month. That is the joint agreement under which those two organizations are operating on these roads.

How far representative? What is their comparison with the manner in which the fluctuation in business and unemployment affects other people. Why, if your Honors please, in no branch of industry is this great problem of unemployment so nearly taken care of as in this particular branch of the service.

I was interested in the inquiry made the other day—instead of reading these records at night, I was much interested in an article in this month's Century, by Frederick C. Howe, United States Commissioner of Immigration, on the general subject of unemployment. It is not a railroad problem, it is a problem that affects the question of what is to be done during the winter months by the harvest hands, what is to be done by the men who work in the forests, what is to be done by the seasonal fluctuations in the trades. It is not a problem peculiar to railroading, but is better solved in railroading than in any other branch of industry. It is not a problem affecting only this country. As Mr. Howe points out, it is a problem that the nations of the world are employed in solving by different means, solving more satisfactorily, he says, in other countries, solved by actual national inquiry into the problem of necessary unemployment.

These men are better protected than in any class of industry in the world. These figures here as to 65 per cent of this vast payroll, 65 per cent of their numbers absolutely fixed from day to day by a scale that does not vary, and duties that vary only in the slightest measure. Only 35 per cent in any manner subject to variation, and in that 35 per cent, by the exercise of their seniority principles, their seniority rights, only those in the lower class of it, ultimately affected. When by comparison with what confronts those in the building trades or in any other line of industry, the problem of unemployment is better solved.

I am frank to say, it is a problem not entirely solved in any line of industry at the present time.

Compare the situation of these men. They talk about the present outlook of the situation. The same day they were reading from the newspapers, there was handed to me this from the same newspaper, by the Associated Press:

“Pittsburg, Pa., March 29.—John Williams, president of the Amalgamated Association of Iron, Steel and Tin Workers, announced to-day that while all the votes cast by the membership last Saturday on the reduced working scale had not been counted officially at headquarters here, enough progress had been made to show that the reduction had been accepted. The Middletown and Canton (O.) and Covington (Ky.) men had, he said, accepted the scale and the question was now settled until the latter part of May, when the association will meet in Louisville, Ky., to formulate a new scale. The present agreement will expire June 30, next.”

I submit, if the Board please, that in the presentation of this case we have shown facts and figures, not mere hypothetical men, but payroll men, actual men drawing actual money, not merely for the one month where we show it as to every man in the service, but showing through the entire year, which they say tapered off into a particularly bad year, showing it through that entire year, or at least one man on every operating division in every class of service on all the railroad companies.

That the facts and figures as thus submitted we contend justifies the statement that was made in opening, that a canvass of this entire field in a good faith effort to ascertain whether by comparison with other crafts, either with others in the railroad craft, or, by comparison with the brethren of the East and South, there was no fair cause for complaint.

Why, I call attention, gentlemen, in the brief, to the proposition that this request is for the fixing of a minimum rate, a minimum rate in these various classes of railroads. A like request, a like award has been made to both Eastern Firemen and Eastern Engineers, that is, that this rate should be the minimum rate.

Our Exhibit No. 19 shows that the average tonnage of trains in the Eastern territory is 40 per cent greater than ours. 40 per cent! The tonnage of the South is greater. This vast scattered

country, this vast territory where traffic must develop, has not yet attained to within 40 per cent of what is being hauled by the engineers and firemen in Eastern territory.

Why should we pay higher than the minimum rate fixed for conditions such as that? Our income per mile. "Oh," Mr. Lauck said, "income per mile could not do, because you have got so many more miles." "Well, then, let us take it per dollar of investment." "Well," he said, "I think the greater value in the East, the greater value in the East would more than offset that." So, before he left the stand, I asked him to make sure as to his figures, and he comes back just before leaving, and gives assent to the proposition that per dollar of investment, treating the right of way as of greater value, if you please, but per dollar of investment, as shown by the reports of the Interstate Commerce Commission, for each dollar of investment in the East, the return, the gross return from gross revenue, is 23.49 cents, against 15.51 cents in the West. Why should the West, in the fixing of a minimum rate, where traffic is 40 per cent less in density, where out of each dollar of investment we have 15.51 cents with which to pay all labor, all classes of employes, all capital—why should this 15.51 cents for moving traffic, 40 per cent less in density than that in the East, be placed upon a higher basis than the basis fixed by arbitration in the East, and especially when that basis thus fixed is the minimum rate in each class of service?

Why, gentlemen, we believe, we believe in all sincerity, that these men themselves, hearing only the complaints about the transitory, evanescent, hard experience, have that fixed in their minds. And we lawyers, like other men, we remember the nights when we stayed up 24, 48 hours at continuous work, to get a brief on file. Those are the things that fix themselves in our minds. These gentlemen, these officers here, remember about the hard occasional trip. They don't hear of the days and days, the twenty-nine, the thirty days out of the thirty-one, when the run is made in short time, and big money. We don't believe that they have had a fair picture of this whole field. We think the figures that we submitted, viewing this whole situation as one picture, we think that that surprised them, that they were surprised by the showing of actual facts and figures as to what the men here now receive, treated as a class, treated as a whole. We

are not surprised that Mr. Carter, in connection with this Exhibit 41, the payroll exhibit for the entire year, should say that his case was lost if you took these exhibits seriously.

On the issue thus made, we ask that the exhibit be treated seriously. We believe that it should be treated seriously. And we believe that such serious consideration can lead only to the one conclusion, and that is the conclusion stated at the outset, that these men, treated as a class, under the schedules which they are now working, are receiving full, fair and adequate compensation, reasonably commensurate with the duties that they perform, which we all admit to be duties that are well performed, and should be, as we believe they are, well paid for.

And, in conclusion, I want to express upon behalf of the Committee that I represent—and not merely upon behalf of the Committee, but also personally—my hearty appreciation of the great courtesy in bearing with me this length of time, and also our due appreciation of the great patience and tolerance that has been shown to us in the presentation of our case. Not merely to the Members of the Board do we desire to express this appreciation of their great patience and great tolerance toward us, but also to the Secretary of the Board for the courtesies that he has extended to us.

And to the gentlemen upon the other side, now that the battle is over, we want to say that we have presented the facts and figures which we felt ought to persuade them, as well as to persuade the Arbitrators. That it ought to leave the men satisfied and contented; that when they see the whole field and view the situation as a whole, the members of their organization have, in truth and in fact, no just ground for complaint concerning present conditions in Western Territory.

I thank you, gentlemen.

The Chairman: We will take a recess until two-thirty.

(Whereupon, at 12:30 o'clock P. M., a recess was taken until 2:30 P. M.)

AFTER RECESS.

CLOSING ARGUMENT BY W. S. STONE ON BEHALF OF
THE BROTHERHOOD OF LOCOMOTIVE ENGINEERS
AND THE BROTHERHOOD OF LOCOMOTIVE
FIREMEN AND ENGINEMEN.

Mr. Stone: Mr. Chairman, and gentlemen of the Board of Arbitration, everything earthly has an end; and so we have at last arrived at the final session and the closing argument in this long drawn out case; and, for fear I shall forget it in the excitement of the closing, I desire to take this opportunity now of thanking you, individually and collectively, as well as the Secretary, for your kindness, courtesy and patience in listening to this case. I realize that you all have made many sacrifices in order to serve as arbitrators in this case. Perhaps this long war of words has been tiresome to you in the extreme; but in behalf of the Brotherhood of Locomotive Engineers I desire to thank you one and all for the courtesy and patience, and all the other things we have received at your hands. We appreciate them.

So much has been said on both sides that it would seem to me that if further discussion were indulged in, it would tend to befog the issues instead of to clarify them. Yet the questions involved are of such vital importance to the men whom we represent, that we do not want to leave anything undone or unsaid that might place before you in the strongest possible light the justice of their claims.

As chief executive of this great organization, I hope you will pardon the egotism when I say that I have come up from the bottom. I have perhaps shoveled more coal than you could pile in one of these city blocks. I have spent twenty-five years of the best part of my life in the cab of a locomotive, and I know much better than I can put in words the conditions under which these men work, and the hardships that they are daily called upon to endure. I know whereof I speak, because I have lived the life of these men, and because their interests are very near and dear to me, and I only wish it might be possible for this once for me to be inspired, so that I might be able to place before you, in language that could not be forgotten, a description of the everyday life of this great army of trusted employees.

I realize, in presenting our case, that we are perhaps handicapped by the fact that neither Mr. Carter nor myself is a lawyer, while the other side had as their representative an attorney who stands as one of the headliners at the American bar. And yet, if earnestness of purpose, if having body and soul in the result to be obtained from this Arbitration will make up for the handicap of which I speak, I am sure we will have nothing to regret.

In undertaking to speak on this case I am not unmindful of the fact that for two days the Board have listened to the oration of a learned attorney, skilled in the use of language, who, by the employment of suave words and the delusive interpretation of the proposal before this Board, attempts to create the impression that not only are the requests before the Board unreasonable and unfair, but by referring to a few exceptional runs where the engineers and firemen, due to the exigencies of the business, are required to run a great number of miles or remain on duty a long number of hours, he has endeavored to establish the fact that such wages are representative of the wages paid to all engineers and firemen who do not lay off and who work throughout the month.

Gentlemen, I stand here ready now to withdraw every proposition in connection with the passenger service, if the railways are willing to guarantee even \$200.00 a month to all passenger engineers, and \$120.00 a month to all passenger firemen engaged in that service, operating under the present schedule and in the same manner as was the practice in October, 1913. But I fear such a proposition would prove unacceptable to the railroads, for, unquestionably, it would cost very much more money than what our proposals contemplate.

And, apart from the proposals, gentlemen, it is the first time in my long experience in representing engineers that I find my duty and a proper regard for my constituency forcing me to publish in pamphlet form and distribute to the engineers and firemen in the Western territory the statement of counsel for the railroads, in order that these men may be fully informed as to the position of the Managers, both as to the compensation they receive and also the unappreciative sense in which their loyal service is held, assuming, of course, that Mr. Sheean speaks for the Conference Committee of Managers.

Gentlemen, I think I can properly assume that this Board

will reach their final determination on each and every request found in our proposal by the evidence, and not by statement of counsel who, I may say, with all due respect, has never had any experience as an engineer or fireman and, therefore, his statements are necessarily hearsay only, and, in our opinion, should not be considered.

It may be frankly admitted that if a debate between myself, Mr. Carter and counsel for the railroads is to be the controlling factor, I, for one, would not attempt to deny the fact that Mr. Sheean's training, skill and vocabulary are much greater than my own, neither would I gainsay the statement that any proposition that might be drawn up by any party or parties might not be assailed by any learned gentleman of similar experience and training as that of counsel for the railroads, particularly if the prime object was simply to win the case.

It must be remembered, however, that counsel for the railroads shares none of the responsibility of transporting the human freight of this great country. It is an easy matter for one who sits in a comfortable office, protected against the elements, to speak in a slighting manner of the services of engineers and firemen. His viewpoint is from an entirely opposite direction. Doubtless he can and does partake of three meals daily at a table, and sleeps securely in a comfortable bed at night; but that is entirely a different position from the engineers and firemen, struggling with a heavily laden freight train, or attempting to drive a fast passenger train through the fog and darkness of the night, with heavy responsibility for the safety of people entrusted to their care. When these actual conditions are honestly and fairly considered, the statements of the learned counsel, it seems to me, should be taken with little consideration.

We also find the same gentleman attempting to determine the wages of engineers and firemen by disregarding the entire number of hours worked or the number of miles run, and in some instances referring to these wages on an hourly basis and in another instance referring to these wages on a mileage basis, seemingly for the purpose of strengthening each particular point that may be under discussion.

Not being contented with that delusive statement, his oration, as it might be properly termed, is predicated on the fact that an engineer or fireman may be considered on duty 365 days

in the year. Otherwise they should be charged with not working all the time available. He is not even willing to allow one day during the entire year for religious duties, notwithstanding the ordinary practice of mankind, and the teaching of the Divine Creator specifically provide that every man should have at least one day in seven. Yet I believe it can be safely stated that counsel expects, and probably demands an income that in a financial way, at least will insure that he may take a vacation and obtain a temporary relief from his very arduous duties.

Gentlemen, I, without hesitation, state that counsel has not experienced the many arduous duties inherent to the duties of a locomotive engineer or fireman. He has not been one of the gentlemen who make up the 70,000 that have contributed nearly \$8,000,000 in the past ten years to take care of the human wreckage due to the hazards of the transportation industry. He probably has not suffered the privations due to a very limited income while passing through what might be termed the extra board. He has never arrived at a terminal tired and hungry, hoping that he might at least have twenty-four hours' rest, and then, while registering his arrival, been informed by some official that on account of pressing demands of business it will be necessary for him to again go out on the road at the expiration of his eight or ten hour legal rest period.

And now, because of that willing co-operation by all men, all engineers and firemen, to work night and day when the business of the company demands this sacrifice, we are confronted with statements from the learned counsel that the earnings of the engineers are now so much that it would be imprudent and unwise for a Board of Arbitration to seriously consider further advances. and to establish this fact, the month of October, 1913, was chosen as a month to exhibit the earnings of the engineers, so that it would bring to the Board an idea of the large earnings of the engineers, when it is a well known fact that in that particular month the engineers were seeking more rest than that allowed by the Hours of Service Law.

And we submit, gentlemen, that if hearty co-operation is expected or desired, different methods should be employed than those of trying to bring into disrepute the services of these men by the learned and distinguished counsel.

Probably no better or stronger proof could be found or ex-

pressed in regard to the statements of those gentlemen about the true conditions under which locomotive engineers and firemen operate these large locomotives with excessively heavy tonnage, than have the Board of Arbitration recall the remarks of counsel yesterday afternoon, when he endeavored to picture in words the engineer and fireman who had been tied up under the Hours of Service Law, and stated the engineer retired to a bed chamber similar to that found in the Blackstone Hotel of this city. Why, gentlemen, if the counsel or Managers are in a position to assure us that at all times when we are tied up under the law, it will be at a place and at a time when our men can enjoy a bed similar to that found in the Blackstone Hotel, or any other first class hotel, then I say that declaration will materially change the complexion of the complaint which is reflected in our proposition wherein we seek to obtain compensation for continuous time when tied up under the law. Not for the purpose of directly or indirectly receiving greater compensation, not for the purpose of creating a situation where we might be guilty of petit larceny, so adroitly described by counsel and others, without making any direct allegation, by pointing out the fallibilities of human nature and endeavoring to uncover the human equation in a manner that would lead the Board to believe that an engineer would deliberately forego his home, forego his family, and deprive himself of all the comforts of a home, and plan to delay the train to such an extent that he could be in a position to extract from the companies' treasuries the meagre sum of eight hours' pay.

Gentlemen, I feel that such a suggestion should not merit further discussion on my part. To do so would only lend dignity to such an unwarranted and undeserved statement. The reputation of the great organization I represent is well known. Its record is an open book, stands before the world, and it cannot be tarnished by any such unjustified statement.

I was more than interested in the warning given the Board by counsel for the Railroads, wherein he carefully reminded the Board that in the state of Illinois, at least, the preservation of equity was separate from the law. That the old definition that equity was applying principles of right and good conscience where the law, by reason of its universality, had been deficient, was strongly impressed. While I am not an attorney and do not wish by word or act to imply that I consider it necessary to give

to you, gentlemen of the Board, who are versed in law, any advice in this respect, still I venture the thought that perhaps Mr. Sheean did not give the full interpretation. As I understand it, it is accepted in the most general sense, that is, we are accustomed to call that equity which in human transactions is founded on actual justice, or in the more broad and philosophic definition, equity means to do to all men that which we would want men to do unto us.

And, gentlemen, if this Board is guided by that principle, we can all be assured the conditions under which the engineers and firemen toil, or the compensation granted, will be such that no room for complaint can be truthfully and consistently lodged. While the gentleman very cautiously and diplomatically prefaced his oration by stating substantially in part, that it was the desire of the railroads to fully and fairly compensate these men for their responsible duties that, were faithfully performed, yet a study of his remarks later will clearly establish the fact that little consolation can be found in any of his statements by the men who are now pleading before this Board for a fair and reasonable award which will bring to them proper compensation and full recognition of the time given and the miles run, together with all conditions of service rendered. And we believe that we are well within our rights to hope and expect the Board, under government regulation, will not lightly consider this appeal from a class of men who command the interest and concern of every American citizen.

In looking over the brief by counsel for the Railroads, I know he has quoted at length from the statements of Mr. Tollerton, mechanical expert. I desire to briefly review two or three of these statements.

The first I desire to call your attention to is the Walschaert valve gear. Mr. Tollerton, on page 4276 of the proceedings, testifies in regard to this:

“Mr. Sheean: What are these devices that you say constitute this additional expense to these eight-five engines that you are speaking of now?

“Mr. Tollerton: The outside valve gear.

“Mr. Sheean: What purpose does the placing of the valves on the outside have, other than to relieve the engineer and fireman?

“Mr. Tollerton: It has no purpose, and does not improve the engine efficiency in any way.

“The Chairman: Well, will you kindly explain what that is?

“Mr. Tollerton: As I said this morning, the older type of locomotives had the eccentrics underneath the engine, attached to the main axle. It was necessary for the locomotive engineer to go under the engine, in the event of an eccentric becoming loose in the axle;”—that should read “on the axle.” “It was necessary for him to give it care and attention. With this improvement he gets at everything from the outside, or on the ground, standing on the ground. That is a \$350 extra charge on a new locomotive. On an old locomotive already in service, on which a great many railroads are putting the outside valve gear in their shops, it represents a shop cost of \$800.

“The Chairman: Now, you say that relieves an engineer from performing certain duties that he would otherwise be required to perform?

“Mr. Tollerton: Yes.

“The Chairman: Was it put on the engine with that view?

“Mr. Tollerton: It was put on the engine with that view, and also motive power officers, designing locomotives, realized that the engine today must be so designed as to make it practically failure proof. Everything must be accessible. The enginemen having been relieved of so many duties, compels the motor power officers to spend this extra cost on a locomotive to bring this situation about.”

On cross-examination I asked Mr. Tollerton the following questions, page 4353 of No. 43 of the Proceedings:

“Mr. Stone: Is it not a fact that it was due to many other things, besides the convenience of the engineer, that the Walschaert valve gear was adopted?

“Mr. Tollerton: I do not recall at this time. When I made my statement yesterday it was not with any desire to discredit the engineer as regards the Walschaert valve gear. The Walschaert or other outside motion represent the gradual evolution in the locomotive design, from which probably both the locomotive engineers and the railroad company derive some benefit. It has, however, very much lightened the work of the locomotive engineer.

“Mr. Stone: It has also, has it not, very much lightened the work of the mechanical operating officers?”

“Mr. Tollerton: No, I do not agree with that statement.”

Now, Mr. Chairman, I desire to read to you an excerpt from the proceedings of the fourteenth annual convention of the Traveling Engineers' Association, August 28 to 31, 1906, at Chicago, Ill., on the Walschaert valve gear, a paper read by Mr. O. H. Rehmeyer. I am not reading the report in full, because it is too lengthy. I am simply reading a few of the extracts:

“The advantage of this valve gear is the difference in weight over the Stephenson link motion. According to statements made by the American Locomotive Works, a saving of 1,745 pounds is possible on our large engines. It can readily be seen that this would reduce the wear on all valve connections; also the liability of breakdowns is reduced to a great extent.

“The Walschaert valve motion is direct, and gives a constant lead from all points of the cut-off, while the Stephenson link motion increases the lead as the cut-off is shortened. The constant lead is an advantage, as in the case of the link motion it is a difficult matter to obtain sufficient lead with large cylinders in the longer points of the cut-off and at the same time keep down the lead and subsequent preadmission and excess compression in the shorter points of the cut-off, where most of the high speed is performed. * * *

“From a point of inspection this motion is far superior to any valve motion in use at the present date. All parts liable to defects are out in plain view of both engineer and inspector, or in fact anyone who is interested in the condition of the locomotive. All parts are easily examined from the outside, it only being necessary to get under the engine in case of packing a cellar. * * *

“In regard to the difference in cost of maintenance of the Walschaert valve gear over the Stephenson link motion, I believe the cost to be fully 25 per cent less. The above figures were obtained from the C., R. I. & P. roundhouse at Burr Oak, Ill., where we have a number of engines equipped with the Walschaert valve gear, while others are equipped with the Stephenson link motion, both classes being in freight service out of that point.

“Engine failures due to the breaking of valve motion connections during 12 months service have been very slight. With

fifteen engines equipped with the Walschaert valve gear we have had only three failures that were chargeable to valve motion failing, while with engines equipped with the Stephenson link motion we have had at least three times as many failures due to the link motion getting out of order."

Following the report, Mr. Conger made the following statement. He was one of the prominent members of the Traveling Engineers' Association, and is generally considered an authority on many questions. He said:

"While the Walschaert gear is not new in the United States, it is only recently that the Master Mechanics and the Engine Designers have been chased out from under the frames. There is no room to get the Stephenson gear in there. I think Mr. Seeley, who knows something about it, can give us some very important and interesting points."

"Mr. Seeley: Mr. Chairman, the Rock Island has taken up the Walschaert motion with a view of eliminating trouble with the eccentrics and other portions of the motion under the engine and between the frames, being chased out, as Mr. Conger has stated. * * *

"The amount of reduction in weight stated in the paper is probably correct for a certain design, although I think it is a little overstated as a general proposition. It has, however, reduced the weight very materially over that of the ordinary link motion.

"The satisfaction which we have had on the Rock Island road in the reduction of valve motion failures is, as Mr. Reh-meyer correctly states, very good over the entire districts on which the engines are operated."

Next I desire to read from the report of the Traveling Engineers' Association held in Denver, Colorado, on September 7-10, 1909. This is the report of a committee of which Mr. Reh-meyer was chairman, and Ira C. Hubbell, T. F. Howley, Robert Collett and Harry Bentley were members; and after the paper had been read, a rising vote of thanks was extended by the Association to the committee.

This is an excerpt from the report of the committee. It is too long to read in full.

"We find that engines equipped with the Walschaert gear have the advantage over those equipped with the Stephenson

motion for the reason that in case one or both eccentric rods are broken, engine can be taken in under her own steam, etc."

"From a point of inspection, this motion is far superior to any valve motion in use at the present time. All parts liable to defects are out in plain view of both engineer and inspector, or in fact anyone else who is interested in the condition of the locomotive. All parts are easily examined from the outside, it only being necessary to get under engine in case of packing a cellar or possibly set up a wedge. All other work can be taken care of from the outside.

"In case of accident to any part of the valve gear it is outside and easy to get at, if necessary to take down or block any part of same.

"On the large, heavy power of today with the eccentrics, eccentric straps and blades, links, transmission bars and rocker arms underneath, there is very little room to work in case anything happens to the valve motion.

"The wear on all valve connections is undoubtedly much less, due to the fact that all connecting parts are much lighter in the Walschaert motion than in the Stephenson, and are not so apt to cause the valves to get out of square from wear."

Next, I desire to read to you from the American Railway Master Mechanics' Association, 1907. This is the report of a committee of which Mr. C. A. Seeley of the Rock Island was chairman. Mr. Robert Quayle of the North Western was one of the committee, Mr. L. H. Turner of the Pittsburgh & Lake Erie was another, and Mr. J. H. Manning of the Delaware & Hudson was the other member. I read from paragraph 7 of the report. And in all of this, there is nothing said about the engineer. He was not considered at all.

"The time came, however, when it became expedient to make changes for some of the following reasons:

"Some types of engines have so many wheels or they are so closely grouped that it is a difficult matter for engine men to get under them except when over a pit.

"This contributes to neglect, lack of prompt adjustments for wear, lack of proper inspection and a more rapid deterioration. With the increase in size and weight, the dimension of eccentrics required for large axles are excessive and their peripheral speed is so great as to make maintenance and lubrication

of the eccentrics and straps expensive and troublesome. In the long list of materials for this purpose appears plain cast iron; cast iron, babbitt lined; bronze; cast steel, brass lined; gun metal, etc. —”

For eccentric straps.

“By the abolition of eccentrics and straps, a long list of engine failures is eliminated; expense for maintenance and lubrication reduced; room gained for better cross-bracing and strengthening of frames and adding to convenience on account of men not being required to go under engines to the same extent.

“On heavy engines, the weight of all moving parts of a link motion, from the eccentric straps through to the valves, is so great as to contribute to accident and rapid wear so that an efficient valve motion with lighter parts and greater accessibility is in demand for heavy power.”

The practical operations of the Walschaert motion is best shown by the testimony on roads using it in considerable numbers and at a recent meeting of motive power officers and locomotive builders who discussed the results of the Walschaert motion, the roads represented having about 1,000 such engines, it was the unanimous opinion that Walschaert motion was equally well adapted to fast and slow passenger and freight service that equivalent economies in fuel and water were obtained, that no reductions of tonnage rating were necessary, that expenses of maintenance and repairs were reduced, that inspection and repairs were facilitated, that construction advantages were increased, that valve adjustments made or maintained and engines kept square much longer on account of the motion being more direct, rigid and positive for the passage of the valve driving stresses, and that convenience of the enginemen, inspectors and shop men is promoted by the accessibility of the parts; clearly proving, Mr. Chairman, that the roads adopted this for economy, and not spending this money for one of the refinements for the engineer.

Next, I desire to speak on the question of superheated engines. On page 4,346 of No. 43 of the Proceedings I quote the following:

“Mr. Stone: Also, in reply to the Chairman, you said that

superheating did not increase the tonnage of the engine, did you not—the tonnage rating of the engine?

“Mr. Tollerton: That is, at starting.

“Mr. Stone: The fact remains, the superheated engine of the same type does handle more tonnage, does she not?

“Mr. Tollerton: I think I made that perfectly clear this morning.

“Mr. Stone: Is it not a fact, by superheating engines you can increase their tractive power to a very great extent?

“Mr. Tollerton: Not without making some other change in the locomotive than applying the superheater.

“Mr. Stone: But by superheating is it not possible to give an engine much larger cylinders, and still provide steam for it, and thus increase your tractive power from 30 to 40 per cent?

“Mr. Tollerton: It is not.

“Mr. Stone: Mr. Chairman, I have to disagree with the gentleman again. I have here the blue prints of the Great Northern. I want to read you what the Great Northern is really doing. They have an H-2 class of engine. I believe they are consolidation. They are 22x30, or originally were 22x30, and carried 210 pounds of steam. Their tractive power was 35,350 pounds. These engines were superheated, and given cylinders 23½x30. The steam pressure was reduced to 200 pounds, and the tractive power is 40,820 pounds, an increase of 15 per cent.

“Take their F-8 class, of which they have quite a number. They were originally 20x32, with a steam pressure of 210 pounds; a tractive effort of 39,090 pounds; they have been superheated, given cylinder 26x32, the steam pressure reduced to 160 pounds, and their tractive effort is now 53,000 pounds, an increase of 41 per cent.”

I desire to read an excerpt from the proceedings of the Sixteenth Annual Convention of the Traveling Engineers Association held August 29, 1908, at Detroit, Michigan.

From the report of the Committee on Superheated Steam and the best method of getting good results when engines are in service on trains, this is a report made before this committee by Mr. Max Toltz. I think Mr. Toltz is a Missouri Pacific man, but I am not sure.

Mr. Byram: A Great Northern man.

Mr. Stone: A Great Northern man, thank you. “It is ad-

mitted by everyone that the superheated steam engines not alone handle trains better, and in passenger service especially pick up a train quicker, but they can haul a better tonnage than the saturated steam engine of the same size and type. The average of this increase in tonnage is 10 per cent, while the maximum has been recorded to be 17 per cent." At the conclusion of this paper a rising vote of thanks was extended to Mr. Toltz by the committee for his able paper on the subject.

Now, one more quotation from Mr. Tollerton, and I have finished. On page 94 of the Railroad brief, Mr. Tollerton is quoted as follows:

"Mr. Tollerton (Record 4261) said that it is just as important in his judgment for the lubricator to be working properly at all times for the successful operation of the locomotive, as it is to open the throttle."

I believe we proved to the Board, by not only one, but a number of witnesses, that you could throw the lubricator away and they would still get over the road. And I am sure you could not throw the throttle away and leave it closed, and get over the road. Man after man testified that in case the lubricator quit feeding or the glasses broke, that they would oil through the relief valve and keep on going.

And continuing, Mr. Tollerton said, as follows:

"That the only ones capable of caring for the lubricator properly are the engineer and fireman; that the lubricator should be taken care of while the engine is warm and filled so that it can be blown out with steam; that there are no other employes connected with the roundhouse capable of properly taking care of the lubricator like the engineers and firemen, and this is one of the duties they should perform."

No other employes connected with the roundhouse capable of properly taking care of the lubricator, like the engineer and firemen. Gentlemen, I wish I had a lubricator here to show you what can be done when the lubricator is cold. I can teach an office boy or call boy in ten minutes to fill a lubricator. I can teach the poorest immigrant who ever came to our shores and who cannot talk our language, how to fill a lubricator, in thirty minutes. But here we have a mechanical expert speaking for ninety railroads in this Western territory, who says there is no other employe connected with the roundhouse capable

of taking care of the lubricator, and yet anybody around a roundhouse, the man from the clinker pit, or anybody else, can take care of the whole engine and hostle her, but he cannot fill the lubricator.

I think, after reading those different citations from the most eminent authorities in America, and as I stated, at the time I started to cross-examine Mr. Tollerton, that he did not agree with any authority, either living or dead, on any subject, you will see that he does not agree with any of the well known authorities on any of the subjects under discussion, therefore, any of his statements as a mechanical expert should not be given consideration.

There are several points in connection with the brief and Mr. Sheean's discussion on productive efficiency that he has mentioned, that I wish to bring to the attention of the Board.

On page 5 of his brief, Mr. Sheean states that there is some disagreement between Mr. Lauck and Mr. Karn in their attitude toward the question of participation of locomotive engineers and firemen in the revenue gains arising from their increased work and efficiency. Mr. Sheean appears to be under the impression that Mr. Lauck stated that some additional work and responsibility should be shown by locomotive engineers and firemen before they would be entitled to have participation in revenue gains. This is a wrong impression. He stated that all employes should be entitled to a share in increased output, or in the more economical handling of transportation, regardless of whether they were forced to do more work or assumed greater responsibilities, because of the progress in operating efficiency. Any other attitude, Mr. Lauck stated, would imply that new inventions and processes which reduced operating costs would be made the means of economic degradation of railroad employes. In other words, any such point of view as that held by counsel for the railroads would require that industrial progress should be used to retard the economic advancement of the wage earner. The invention of new machines, or labor saving devices, under this interpretation of the situation, and the resultant increase in revenue gain, is equivalent to saying that railroad employes shall not share in industrial advancement, and that they cannot have any greater measure of economic well-being, unless they can show beyond reasonable

doubt, that they have to work harder or have to assume greater responsibilities.

Such an argument practically implies that railroad employes shall be reduced to a condition of slavery. For we confidently hope that improved methods and operating efficiency will produce more revenue with less actual work and responsibility to locomotive engineers and firemen. We expect to have a share in these revenue gains, either in higher rates of pay or in shorter hours. This has been the case in other industries, such as the bituminous coal mines. Under the interpretation of counsel for the railroads, however, we should be filled with gloom and should oppose the adoption of every device or process in railroad operation which would make for more economical operation or less work to engine crews, for, as our work might decrease, so, according to the claims of the railroads, we should not only not have an increase in wages, but, logically, would have to suffer a reduction in rates of pay.

Such a method of reasoning as to the determination of rates of pay is manifestly unsound, and completely out of joint with modern conditions. It really belongs to the Middle Ages or to a society based on the enslavement of the working classes.

Mr. Lauck's real and complete statement was that all railroad employes, whether their work increased or not, and whether they were remotely or directly connected with improved operating conditions, should participate in revenue gains. This was the basic principle put forward by him and other witnesses. To this, however, was added the statement that those classes of employes who bore the direct burden and responsibility of the increased productive efficiency, such as the engineers and firemen in railroad operations, should have a proportionately larger share.

Some of Mr. Lauck's statements in this connection are as follows:

"If we are going to have industrial progress we ought to give participation to the worker, after a fair remuneration has been given to capital.

"Mr. Nagel: Then, if an increased productive efficiency is secured by the employment of a superior engine, in your opinion, the engineer in charge of the engine should have his wages

correspondingly increased, although it could be shown that his labor and his responsibility is in no sense enhanced?

“Mr. Lauck: I think so, yes, sir. I think if we do not hold to that view—always granting that capital must receive a fair and liberal return, and also always conceding that managerial ability must be given a generous reward—I think if we do not hold to that view, the progress in invention and general industrial progress would work to the detriment of the wage earner rather than to his benefit. For instance, taking the case of Mr. Ford and the automobile industry. There you have a case of remarkable productive efficiency developed from managerial ability, and a surplus return of \$10,000,000, which he distributed to his employes, while his employes probably did not contribute very much to that—it was Mr. Ford’s or somebody else’s managerial genius or the genius of organization and the use of machinery; and I think the same is true in any kind of industrial enterprise, if we are going to have industrial progress we ought to give participation to the worker, after a fair remuneration has been given to capital, after it has been remunerated for risk, and managerial ability has been compensated. It seems to me if we do not do that, that is the only way of bringing about a true progress and offsetting any revolutionary movement.”

That is on pages 2,247 and 2,248 of the proceedings.

Installation of improved machinery, decreasing labor and increasing output should not vitiate the principle of the remuneration of labor on the basis of its increased productivity.

“Say a man is working on an anvil, and you substitute a trip hammer for the anvil, that increases his output. Then I think he should be given some measure of participation, just like the engineer, who may do less, should have some measure of participation in the improved machinery, on the general theory that labor should have some share in the increased productivity brought about by the machinery or better capital instruments. However, if the labor is affected by increased work, of course, it ought to have more. The characteristics of a great deal of machinery in its application and installation is less labor on the part of the workman; still that would not vitiate the principle, it seems to me, although it would be correspondingly less.

“Mr. Sheean: Well, just what is the principle here, Mr.

Lauck? That as productive efficiency decreases, that wages should share commensurately downward?

“Mr. Lauck: No, the principle is that as productive efficiency increases, attended by a more severe strain, and decline in earning capacity of the men, and with the necessity of handling more fuel, that they should be given a more fair measure of participation, to offset these added works, hazards and responsibilities. Then, these special cases have been brought up, as to a man who does not do anything to contribute to this result; that is, applying to theory very widely, and putting a very extended specific application to it, and the only way it can be justified would be on granting some measure of participation for nothing that the employe may do, but giving him some measure of participation in improved productive processes, which has been characteristic, I think, of most factory production, or machine production.” Pages 2,449-50.

Increased wage justified where employes contribute to an improved or superior service.

“Mr. Nagel: You base your rule upon the fact that the fireman or engineer, or switchman contributes to an improved service?

“Mr. Lauck: Yes, sir.

“Mr. Nagel: And not solely upon the circumstance that he incurs a heavier service by the contribution which he makes.

“Mr. Lauck: No, sir. Although, in the case which I specifically have in point, that of the engineers and firemen, I have endeavored to show, for the fireman, that there is a greater burden of work falling upon him, and for the engineer, greater responsibility by the heavier train load.

“Mr. Nagel: I understood you to say yesterday that you do not rely upon that alone?

“Mr. Lauck: No, sir.

“Mr. Nagel: That you think an increased wage is justified where the engineer or fireman contributes to an improved or superior service?

“Mr. Lauck: Yes, sir, that would be my personal view of it.”

In his brief, counsel for the Railroads has gone further and has compiled tables to attempt to show that the increased work and productive efficiency of the railroad engineers and

firemen employed by the Western Railroads have not been profitable to the railroads since 1910. I shall take up this point later, in detail. At this time I wish to say that even if productive efficiency of engine crews since 1910 had not been profitable, it would not affect our argument. It is not incumbent upon us to show that productive efficiency, beyond the locomotive ton mile and train mile has been profitable. At any rate, before we should accept any such statement we should expect the railroads to prove to us that operating management has been competent and financial management wise and proper. But the principle right here which I wish to emphasize most emphatically, and to which I wish to ask the Board to give careful attention, is that we do not admit that the wage adjustment of 1910 satisfactorily settled all matters up to that date. We have repeatedly stated this during the taking of testimony, and I wish to repeat it again in the most forcible manner of which I am capable.

No such contention or assumption underlies our Arbitration Agreement. The adjustment between the Railroads and the Engineers and Firemen in 1910, especially the Firemen in 1910, was based on increased cost of living prior to that year. We have secured higher rates on heavier engines. These rates, however, have been inadequate for our increased work and responsibility. Our increased productive efficiency has never been recognized. We believe it has yielded profits since 1910. However that may be, it is of no significance. There is no ground for restricting the question as to its profitableness to the railroads since 1910.

We realize that hundreds of millions of dollars, partially the fruits of our labors in the past, have been capitalized or dissipated by financial mismanagement of the railroads. We are willing to let the dead past bury its dead, but the railroads are constantly bringing it up and attempting to use the results of their own folly against us. Our hope now is to share in our present and future productive efficiency. I do not believe the Board will permit us to be debarred from this hope.

The counsel for the Railroads states that the engineers and firemen are employed to run engines and produce engine miles, which are units of expense to the company, and units of compensation to the engineers and firemen. From the stand-

point of compensation, this is correct. From the standpoint of railroad operations, it is incorrect.

Locomotive miles are produced in order to produce ton miles. The possibilities of the engineer and fireman in making locomotive miles are conditioned upon how many ton miles are attached to the locomotive or the weight of the train load. Increase the weight of the train load, and unless the tractive power of the engine is correspondingly increased, or curves or grades are eliminated, you thereby reduce the number of locomotive miles which an engineer or fireman can produce.

It is therefore unsound to speak of engineers or firemen producing locomotive miles. Under such a classification trainmen would be producing train miles under the same train on which the locomotive crew was producing locomotive miles, and so on through the different classes of employees. The engineers and firemen are paid on a locomotive mile basis to produce ton miles and passenger miles. To consider they are producing locomotive miles without relating the locomotive miles to train miles or ton miles and train loads is absurd. It would be equivalent to saying that engineers and firemen are paid certain rates per locomotive mile without any regard to the locomotive load and without relating the value of their services to anything—either cost, revenues or work done.

Mr. Sheean refers to the greatest of present day problems as the "alleged increase in cost of living." This has already been fully discussed by Mr. Carter. I am surprised, however, that Mr. Sheean should refer to this fact of present-day existence as an "alleged increase in cost of living." I am more than surprised too that the exhibit prepared by the Bureau of Railway Economics and presented by Witness Vance should have been made the basis of argument. No more statistically unsound exhibit was ever submitted to an arbitration board, or to any body which had to pass judiciously upon economic facts. We examined this exhibit critically and found that it was not only unsound, but that sweeping conclusions were based on a ludicrously small array of information selected by investigators who were interested in proving a certain point. We prepared a complete refutation of this exhibit, but when the proceedings were prolonged by our rebuttal testimony, we did not deem this exhibit of the Bureau of Railway Economics as

being worthy of taking up the time of the Board with its technical imperfections and unsound conclusions. I do not wish to take up any time with it now except to say that I marvel at the audacity of the Bureau of Railway Economics in preparing and presenting such an exhibit to this Board. The argument based on it, however, I would briefly refer to for a moment by way of supplementing what Mr. Carter has said. The contention of the railroads is that the compensation of engineers and firemen has increased more than the cost of living. Any such increase in compensation could have come to us only through working overtime.

Reduced to its last analysis, therefore, the railroads practically say to us, "You have no ground for wage increases based on higher cost of living because you have overcome the evil effects of higher prices by working longer hours." In other words, they say, "You don't need any wage increase because of higher prices. Just work a few hours longer each day and you will earn enough to offset the higher prices."

The absurdity, not to mention the effrontery, of such a statement is obvious.

Moreover, we claim most emphatically that we do deserve consideration because of an increase in the cost of living since 1910. The adjustments in that year were to provide for the higher prices and cost of living of previous years. We have had no advance in rates of pay since 1910. We earnestly ask the Board to consider the higher cost of living now as compared with 1910, in considering our requests for higher rates of pay. We believe that they should be given consideration on this ground, if there were not the other strong reasons of our increased work and responsibilities.

THE EFFECT OF THE INDUSTRIAL DEPRESSION UPON CAPITAL AND LABOR.

The industrial and trade depression through which the country has been passing has brought to light in striking contrast the relative effect of such catastrophes on railroads' employes and stock and bondholders. The wage loss to employes has been much greater than the loss in income to investors from the passing of dividends or of interest payments. As a matter of fact, dividend and interest payments have been passed by only a

few Western Railroads, which had been weakened by past financial mismanagement for over-capitalization. In the case of the companies of more sound management, if dividends were not earned because of a decline in traffic, the deficit in operating income was made up from accumulated surplus, and the usual rate of disbursement maintained. The loss to the employe was also of much greater significance than to the stock or bondholders, because the employe practically had his means of subsistence curtailed through enforced unemployment. In general, it may be said that the employes were the ultimate and worst sufferers from the depressed business conditions of the last year. The incidents of this disastrous depression rested largely upon them.

PAYMENT ACCORDING TO WEIGHT ON DRIVERS AUTOMATICALLY ADJUSTS ITSELF TO TRAFFIC CONDITIONS.

In this connection, I also wish to call your attention to the way in which our request for rates based on weight on drivers automatically adjusts itself to railroad operating conditions. In addition to the fact that weight on drivers is indicative of tractive power and productive efficiency, a wage-scale formulated on this basis of payment would accurately adjust itself to business and traffic. It would be a means to the railroads of automatically adjusting labor costs to the volume of traffic handled. Engineers and firemen are paid certain amounts per 100 miles traveled. When there is no traffic to haul, engineers and firemen are not called for duty, and no expense is incurred by the railroads. When traffic decreases, as was the case after the outbreak of the European War, the outlay for enginemen decreases proportionately with the decline in traffic. Moreover, a graduated scale of payments according to the weight on drivers of locomotives brings about a system of payments according to the tonnage actually transported.

Under these conditions, increases in rates of payment to locomotive engineers and firemen may be granted without regard to industrial or traffic conditions for the outlay required of the railroads will not only automatically adjust itself to the traffic offered the railroads and revenue will also be in accordance with the amount of work done and transportation units, or ton miles hauled, by locomotive engineers and firemen.

As a consequence, increases in rates of pay to engineers and firemen may be put into effect at any time without regard to industrial conditions, whether it is a period of prosperity or depression. Manifestly, during a depression in traffic the net revenues of the transportation companies are at a low level and any further decline would be strongly felt. Increases in pay to enginemen, however, in accordance with weight on drivers would not arbitrarily reduce net revenues, but would adjust themselves in proportion to traffic and to the small net revenues.

Financial Management and Increased Productive Efficiency.

The claim has been made by counsel for the railroads, as I have already pointed out, that the increased work and productive efficiency of locomotive engineers and firemen has not been profitable to the railroads. I wish now to refer to this point more in detail.

In the course of our testimony relative to productive efficiency the increased output of engineers and firemen was shown in terms of ton-miles and traffic units. For convenience, and for the sake of avoiding a multiplicity of computations, a traffic unit for this purpose was arbitrarily considered as one ton-mile plus one passenger mile. The object was simply to show the general tendency towards increased productivity of engine crews in terms of transportation units. No claim was made as to this measurement of increased productivity being mathematically exact. Criticism has been made of this designation of a traffic unit, however, and it was also claimed that in dividing the cost of engineers and firemen between freight and passenger traffic, too large a proportion was distributed toward passenger traffic, thereby tending to show, comparatively speaking, a too high productive efficiency for freight engineers and firemen. The statement was made by Mr. Lauck that only the general tendency could be shown from the information which was available to employes. The detailed operating expense accounts of the railroads were not available to us and we could not make any exact division of expenses between freight and passenger traffic.

It was also stated by Mr. Lauck that the criticism as to our traffic unit could be met by adopting a traffic unit which would represent both freight and passenger traffic according to the amount received for each kind of traffic, or, in other words, ac-

ording to the proportion which the average rate per ton-mile bears to the average rate per passenger per mile.

By way of illustration, the average rate per ton mile in Western territory is sixty-three hundredths of one cent, and the average rate per passenger mile is 2.2 cents. In terms of the amount received for each class of traffic, therefore, one passenger mile is equivalent to 2.4 ton miles, or, in arriving at a traffic unit to represent both passenger and freight traffic, the two units should be combined in a general unit on the basis of 2.4 ton miles to one passenger mile. On this basis of computation the productive efficiency of locomotive engineers and firemen on Western railroads in 1913 would be very much higher than would be shown for ton miles by the distribution of operating expenses to freight and passenger traffic. We did not submit such a comparison, however, because we were content to show the general tendency towards an increased productive efficiency of locomotive engineers and firemen and not to limit the comparison to any recent years such as the period 1909-1913. This purpose was accomplished.

In this argument, the counsel for the Railroads practically says:

(1) In the Eastern Trainmen's Case, the Arbitration Board decided that the last wage adjustment should be taken as a starting point, and therefore, this Board should take 1910 as a starting point, and (2) assuming that the operating management of the railroads has been acceptable, and (3) assuming that the financial management of Western Railroads has been above criticism, and (4) assuming that revenue gains prior to 1910 have been equitably participated in by engineers and firemen, and the surplus remaining has been conserved and has been properly used for developing the earning power and operating efficiency of the railroad properties, and (5) assuming that engineers and firemen have no right to share in the present surplus of Western railroads, which is the joint result of the productive energies of capital and labor in the past—assuming all these things, counsel for the Railroads then concludes that we have no right to higher rates of pay because our increased work and productive efficiency, he claims, has not been profitable since 1910. We have refused to accept, and do now refuse to accept all or any of these assumptions. In presenting our evidence, we

have not conceded for one moment that the year 1910 should be taken as a starting point. If the Railroads really wish to attempt to show that our increased work and productive efficiency has not been profitable since 1910, they should not assume but should demonstrate that the operating and financial management of Western railroads has been economical and acceptable in every respect. This they have not even attempted to do.

Logically, it is not incumbent upon us, before we are entitled to a participation in revenue gains arising from our increased work and output, to prove that the returns from economical operation, or from the increased work and productivity of employes have been sufficient to meet all the requirements of additional capital investment and overhead charges. By the use of larger engines, the cost in terms of engineers and firemen's wages in handling traffic per ton or per passenger mile may be greatly reduced, but the general operation of the railroad may not be profitable for various reasons. There may be a business or industrial depression prevailing which has reduced temporarily the volume of traffic to such a point as not to afford a proper return on capital investment; there may have been a lack of economic foresight in constructing a particular railroad and no possibility of developing enough traffic in the aggregate to afford profitable returns on the investment; the transportation company may be a new one and sufficient time may not have elapsed since its construction for the development of profitable traffic; the operating management of a railroad may be incompetent and the economies and productivity secured through the installation of heavier engines and the increased work and productive efficiency of engineers and firemen may be offset and lost by lack of economy and efficiency in other branches of the service; railroad officials may unwisely yield to the importunities of the public for costly passenger terminals and other unproductive improvements, or they may be forced by unwise legislation to make similar outlays in operating costs or capital commitments which would absorb the gains in productive efficiency by the enginemen, or finally, the financial management of a railroad by improper or misguided measures may dissipate revenue gains or absorb them by unwarranted capital issued and then make the claim that productive efficiency has not been profitable. Over all these factors—those lying beyond the operation of loco-

tives—engineers and firemen have no influence or control. If the public have forced the railroads into unproductive investments or services, they should and would, if the facts be presented to them, through Commissions or Boards, established for this purpose, grant financial relief to the railroads.

If the Committee of Managers assert that the increased work and productivity of the engineers and firemen have not been profitable, this assertion places upon them the responsibility of proving that the Western railroads have been actually operated in every respect with economy and efficiency, and that their financial management has been wise and competent and without reproach. No such evidence has been submitted by the Manager's Committee in the course of the proceedings. Consideration of the profitableness of the work and productive efficiency of locomotive engineers and firemen, and reduced costs of operation should, therefore, by a strict interpretation of the testimony, be limited to the consideration of the basic factors of railroad operations, such as the introduction of locomotives of greater tractive power, and cars of greater capacity, the development of heavier freight train loads, the increased consumption of coal and the cost of handling traffic in terms of compensation to engineers and firemen.

As a matter of fact, although from our standpoint it was not necessary for us to submit this proof, in our direct testimony we did accept the statistics of the railroads as to operating revenues and expenses and increased property investment at their face value, without question, and on the basis of these statistics presented an analysis to show that productive efficiency has been attended with such lower costs and revenue gains as to leave a surplus, after the payment of all operating costs and returns on additional capital investment, for the increased remuneration of locomotive engineers and firemen, and other employes.

This amount we estimated to be more than \$50,000,000 since the year 1909. In order to avoid variations because of fluctuations in business and trade conditions in any one year as compared with another, we were very careful, and made the comparison between the average for the five-year period ending in 1909 with the five-year period ending in June, 1913. No other purposes beyond greater accuracy was had in mind.

In addition to this, we also made comparison of the amounts available for the increased compensation of labor during the periods 1890-1913, and 1900-1913. We did not present these figures because it was deemed sufficient to show the enormous amount available for 1909-1913 alone. As an indication of our failure and that of other railroad employes to secure that which rightfully belonged to us in the past, I shall now give you these figures:

Amount available from revenue gains for the in-	
creased compensation of labor, after the pay-	
ment of all Increased Capital Costs in 1913 as	
compared with 1910 (18 railroads).....	\$98,778,892
1913 as compared with 1900 (37 railroads).....	145,800,156

This is a clear indication of our failure to participate in revenue gains in the past. Moreover, these figures, together with our Exhibit 39, which Mr. Sheean criticises, clearly demonstrates the untenableness of his position. Suppose, for the sake of argument, there has been no productive efficiency since 1900. If our Exhibit No. 39 shows that more than \$50,000,000 has been available since 1909, and more than \$145,000,000 since 1900, it is clear that we have not had a proper participation according to our labor and responsibilities, in revenue gains, prior to 1910. If such is the case, what avail is it to say that there has been no profits from productive efficiency since 1910? Such an argument is self-condemnatory.

The Managers' Committee, however, went a step further, and in their direct evidence presented an exhibit which aimed to show that revenue increases during the period 1910-1914 had failed to meet, in the case of a number of railroads, charges on additional capital borrowed and to maintain dividends. We at first thought that this exhibit was presented to attempt to prove inability to pay higher wages. The counsel for the railroads, however, emphatically disclaimed any such intention. The evident purpose of this exhibit, therefore, was to show that productive efficiency had not been profitable because it was claimed that it had not met interest and dividend charges on increased capitalization. This was the only other inference that could be drawn.

This claim has already been fully discussed and it has been shown that interest charges were fully met in 1914, a year of

depression, and that larger dividend disbursements were made by the Western Railroads in 1914 than in 1910. This testimony of the railroads, however, probably raised the most significant point in the entire proceedings from the standpoint of the future economic welfare of locomotive engineers and firemen. It obviously had to do with the relation of the financial administrations of railroads to wage requests, to working and operating relations and conditions, and to the economic status of railroad employes. It also erroneously assumed that engineers and firemen in asserting that their increased work and productive efficiency had been accompanied by profits to the railroads, should be required to show that revenue gains were made sufficient to pay interest on outstanding bonds and dividends upon stock issues, or, in other words, the assumption was clear, that productive efficiency, if profitable, should yield a return upon the outstanding capitalization of the railroads, or the increase in capitalization during a specified period of time, during which time increased productive efficiency was claimed, which, in this case, included the period since the last wage adjustment in 1910 between engineers and firemen and the Western Railroads.

Furthermore, this contention of the Managers' Committee also assumed that the financial management of Western Railroads was acceptable to the employes. To this, as much as they would like to have done so, the employes could not give assent. The necessity arose, therefore, for locomotive engineers and firemen to show that a fair determination of profits from their increased work and productive efficiency or an equitable basis for the distribution of revenue gains between capital and labor, could not proceed upon the assumption that the financial management of all Western Railroads had been satisfactory and that all the securities which these railroads had outstanding are entitled to receive returns.

It was for this reason that I introduced the rebuttal testimony by Mr. Lauck relative to the past financial history of Western Railroads, and to the present control and financial practices of these companies. I did this with regret because I had no desire to deal in the sensational or to put myself in a position where I would be misrepresented as a muck-raker. This evidence had been prepared for such a contingency as has de-

veloped here. It was withheld until we were forced to use it by the argument of the railroads. It is the logical conclusion, as can be readily seen, of our constructive argument of increased work and productive efficiency, being the economic justification for a wage increase. When the railroads injected into this case the claim that productive efficiency has not been profitable, it became necessary for us to refute this indefensible position. By its introduction into the case, our constructive argument has been fully rounded out and completed.

It will be recalled that in outlining Mr. Lauck's testimony, I stated that we would show that much larger amounts would be now available for the increased compensation of locomotive engineers and firemen, had it not been for the dissipation of the immense resources of Western railroads by misguided or improper financial management, or, had it not been for the constant issue of fictitious securities, for the purpose of absorbing revenue gains arising from the opening of the new Western country, from operating efficiency, and from the increased work and output of locomotive engineers and firemen, and other employes. These points were substantiated in detail by the evidence submitted, which is summarized in our brief, and which may be concisely stated here as follows:

First, it was shown that the extraordinary bounties in the form of land grants from State and Federal governments, which were given to aid in the construction of the railroads, were either dissipated or capitalized by inflation of stock and bond issues for the profit of a few promoters.

Second. It was shown that following the construction of Western railroads and up to the panic of 1893, the development of the country and the resultant increase in earnings was steadily capitalized, and in addition vast resources were made the basis of speculative distributions to stockholders.

Third. After the panic of 1893, a number of leading Western railroads were reorganized and made the basis of large corporate systems until, at the present time, we have practically fourteen companies owning or controlling all of the other railroads which are parties to the present proceedings, and these companies, in turn, by the interlocking and affiliation of banking houses, controlled by three dominant financial groups—Morgan, Rockefeller and Gould. In fact, really only two, because

Rockefeller practically controls the Gould interests at the present time. Under this highly concentrated system of control, we would that railroad employes were under the potential control of these banking groups, that railroad presidents were made and unmade by them, and that the one object for which the railroads were operated was to produce dividends upon legitimate or illegitimate stock issues.

Fourth. Under this newly-developed system of banking control, the process of over-capitalization of the railroads, by means of reorganizations, consolidations, and stock bonuses, has been continued. Large amounts of revenues and resources have been absorbed by bankers' commissions and the fees of underwriting syndicates, the members of which were, in some cases, officers or directors of the railroad companies exploited.

Fifth. The net result of the financial management of Western railroads and its relation to railroad employes may be briefly summarized by saying, (1) that immense resources have been dissipated in the past, and (2) that revenue gains from the increased productive efficiency of employes have been absorbed by the issue of fictitious securities. By way of illustration, fourteen railroads in the Western territory alone, during the fiscal year 1914, paid \$43,167,599 in dividends on watered stock, while seven other Western railroads had \$209,000,000 in fictitious securities outstanding for the purpose of absorbing future revenue gains.

The contention that productive efficiency of employes has been steadily diverted or capitalized is not only shown by the history of Western railroads, but is acknowledged by eminent financiers and financial experts.

The resultant inequalities in the distribution of the output of industry under the present form of corporation organization and control has also been made a topic of public comment and acknowledgment. The old theory of the relative bargaining power of capital and labor in determining rates of wages has been largely abandoned, because of the introduction of labor-saving devices and processes. In order to secure economic justice and advancement, rates of pay should be adjusted to the value of the contribution made in terms of output, and a corresponding participation given to employes in the value of the output. Workmen should be as efficient and productive as

possible, within the limitations of their physical and general wellbeing, and they should be given a fair measure of return in the results of their productive efficiency. It is to this method of work and wage payments that engineers and firemen give their sanction.

In the light of these facts relative to the financial management of Western Railroads, the argument and the exhibits submitted by the Managers' Committee in the present proceedings are equivalent to saying, "By our financial policy we have capitalized your productive efficiency to the maximum degree in the past, and have anticipated it for many years to come, by the issuing of additional securities. You have had no share in past revenue gains corresponding to your productive energies and services, and unless you can show sufficient gains from productive efficiency to pay interest and dividend charges upon our fictitious security issues as well as upon capital commitments in the form of unproductive terminals, track elevations and extensions, your increasing work and efficiency cannot be considered as profitable to the railroads or considered as any ground for increased wage payments."

The Chairman: At this point we will take a short recess.

(At this point a recess was taken for ten minutes.)

Mr. Stone: Such an attitude is manifestly out of sympathy with modern thought and action. It would imply that industrial progress should be made the means for the economic degradation of the wage earner. It would also put a premium upon inefficiency and shut out every prospect of the worker for the advancement of his economic welfare.

As has already been stated, there is no disposition on the part of the engineers and firemen to make any wage request which would impair the financial solvency of Western railroads. It is clear, however, that not only have they failed to participate in the productive efficiency of former years, but if present financial practices are continued and the argument of the railroads is assented to, there would be no hope of sharing in any future revenue gains arising from their work and productivity.

It is for these reasons that the present case has been an unusual one from the standpoint of collective bargaining and the peaceable and judicial adjustment of wage disputes. There

are issues involved which are of infinitely greater importance than the questions as to specific increases in rates of pay or changes in rules and working conditions. We have attempted to set forth as clearly as we could the fundamental factors affecting the labor movement which are largely responsible for present-day industrial unrest and discontent.

Primarily, these factors have to do with the relation of the corporate form of industrial organization and control to wages and working conditions. Under our present methods of corporation finance, great inequalities have resulted in the distribution of the output of industry. Workers have not been able to secure a proper participation in the results of their own work and productivity. Additional output has been participated or absorbed through increased capitalization. The democratic or self-governing movement which began in Europe more than a quarter of a century ago, resulted in our attainment of physical and political liberty. If we are to have a proper measure of economic wellbeing and advancement, in a self-governing republic such as we live in today, it is evident that the principle of productive efficiency must be recognized in fixing wage payments and the financial or corporate control of the transportation industry must be so regulated and adjusted to democratic institutions that a proper measure of participation in revenue gains may be made possible to railroad employees. Any other condition, to our minds, would imply that democratic institutions have been adjusted to transportation corporations.

It would, therefore, seem that before the details of the Award are taken up, consideration must be given by the Board to these fundamental factors. After a decision has been reached as to the fundamental principles which are to constitute the bases of the Award, it would seem that the actual formulating of the details of the Award would be a comparatively easy task. The fundamental principle involved is of greater significance than any article of our requests, which are the bases of this Arbitration.

The term "productive efficiency," as we have used it in this case, does not imply a theory or any academic reasoning removed from transportation realities. It is used to designate an economic right and a principle of economic justice. It describes a natural railroad operating condition, and has already

been given recognition in other industries. In our specific Articles for arbitration, it is embodied in the request for rates of pay based on weights on drivers of locomotives. The greater tractive power of which these rates would be representative expresses itself concretely in heavier train loads, lower ton mile costs, revenue gains, and increased profits to the railroads. We ask the serious and earnest consideration of this principle of productive efficiency.

We have reviewed the past financial history of Western railroads, and the present financial control and practices of these railroads, with the purpose of showing the vital relation of the transportation corporation and its methods of administration to our claim for participation in the revenue gains arising from our work and productive efficiency. We sincerely believe that a failure to secure this participation in the form of higher rates of pay would shut out every ray of hope to engineers and firemen and other railroad employes to obtain an equitable share in the future output of their work, and the proper advancement of their economic welfare. We have set forth as clearly as we have been able, our claim for increased wages upon the basis of our increased work and productivity, and we believe that the evidence justifies the consideration and recognition of this principle by the Board. We are firmly of the opinion that the evidence introduced by the employes, and the exhibits we have placed before you, justify the granting of every rate and rule we have asked for. We believe every request presented is fair and equitable, and should not be scaled down, because the labor of these men justly entitle them to these rates. Witnesses have testified as to the years of training required to fit themselves for the position of locomotive engineer. They have told you of the years of hard labor shoveling coal into the modern locomotive. I have worked all my life, and I know of no labor so hard as that imposed upon the locomotive fireman. And after all the years of service, working up to the limit—in fact, beyond the limit of human endurance, which is clearly shown by the great number who drop out of the service, and after they have passed the many examinations, both technical and physical which they are required to pass during these years to become an engineer; and after that goal has been reached, then come the lean years when they are working on the extra board; working as an engi-

neer, perhaps, a large part of the time during a rush of business, then demoted to firing again, through perhaps several months of dull business; and rotating back and forth between fireman and engineer for, perhaps, eight or ten years. They have told you of the continued examinations, not only mechanical but physical, they are required to pass in order to retain their positions. You have been told of the high standard of efficiency they are required to maintain, with the hours of their own time they are required to give each trip in order to avoid engine failures, for which they receive no compensation.

Another important fact that should be taken into consideration in these requests, is that the hours of service engineers are required to work are unlike those of any other trade in that, with but few exceptions, they have no regular hours. Skilled workmen in all other classes of service have regular hours of employment, nearly always in daylight; regular hours for service, for meals, for recreation and for sleep. The men on the locomotive have none of these. They are called two or three hours before the leaving time of the train. They are called at any hour of the day or night, in all kinds of weather, and cannot have regular meal hours or regular sleep; neither do a majority of the men have daylight for their work. With the men in freight service, especially in heavy, slow freight service, it is a struggle from one year's end to another, to get the necessary rest in order to equip themselves for the next hard trip; and even on the best passenger trains there are always the irregular hours and irregular meals.

From the way in which the railroads have laid stress upon the earnings of a comparatively few men in this case, it might be thought that any man earning more than the average was guilty of a heinous economic crime. As a matter of fact, where large earnings have been shown, it has also been clear that the men receiving these unusual earnings gave an equivalent in hours or service rendered. Even if this were not true, the usual earnings shown by the railroad exhibits would have no significance so far as the matters to be determined by the Board are concerned. They have to do with the extreme cases.

And, Mr. Chairman, I might add that you can take any rule, you can take any principle, and you can break it down by the extreme application of that rule or principle. The ques-

tion does not concern me in the least what one man, after thirty or forty years in service, earned once in a million years, or what some particular man out of this great army of men once in his life happened to earn. The great question that does concern me is what the great rank and file of these men are going to earn, year in and year out, and it is not the extreme application of the rule, highly colored to meet a certain condition, that impresses me in the least. It is how each one of these rules and these articles is going to apply to this great body of men in the ordinary every-day application of railroads. And that, I believe, is the way that the entire question should be looked at.

These men who drew these high earnings are extreme cases. They are not representative of the earnings of the engineers and firemen employed on Western roads. The engineers and firemen receiving high wages constitute an exceedingly small proportion of the total number employed. Less than one engineer out of every two thousand running on Western railroads earned \$325.00 in the month of October, 1913. Only one out of every thousand earned between \$300.00 and \$325.00 in October, 1913. Only three out of one thousand earned between \$275.00 and \$300.00, and only ten out of each thousand employed, earned between \$250.00 and \$275.00 per month. They forgot to tell you that two of the four engineers earning \$300.00 in the month of October, 1913, worked twenty-nine years as engineers before their seniority entitled them to bid in the high priced run, and on account of their age they will only earn this for a short time, while the next engineer on the list, with over twenty-eight years of seniority, can only bid in a run that pays less than \$200.00 a month.

In the case of the firemen, only one fireman out of each thousand earned as much as \$225.00 in the month of October. Only four out of one thousand earned between \$175.00 and \$200.00 per month, and only twenty-three of each thousand earned between \$150.00 and \$175.00 a month. And yet, the earnings of these men have been emphasized and have been given such publicity that it might seem to appear that in their earning capacity they were typical of Western engineers and firemen.

Counsel for the railroads has even gone so far as to compare the earnings of certain engineers with the salaries of gov-

ernors of seven of the Western states. And one of the witnesses for the railroads has compared the earnings of certain engineers with the wages paid to chief dispatchers, division superintendents and other division officials.

I have no desire to burden the records, but I do wish to read you a few extracts from editorials of publications of widely different interests on the subject. The first is an extract from an editorial in the New York Analyst of January 25, 1915. This is a publication generally recognized in financial circles as a high grade publication, and sometimes even called the "Wall Street Bible." It reads as follows:

"Counsel for the Western railroads in the Wage Arbitration who argued that there are engineers who are now receiving more than the governors of seven states, compared the incomparable and proved nothing. Engineers presumably work for their wages. If the governor of any state is working for his wages, either he or the state is to be pitied. Either the state is very poorly served, or the governor sadly underestimates the value of his work. The men need have no hesitancy in admitting the difference between the wages of those of their number who earn \$3,700.00 a year, there must be very few such, and the salary of governors who receive only \$3,000.00 a year. The governors might be very much overpaid as engineers at that rate, but that does not prove that the engineers are paid too much. If they are, that is not the way to prove it."

The next is a quotation from the Saturday Evening Post of March 15, 1915, entitled, "Conservatism and Greed."

"The truly conservative mind regards high wages as the economic original sin. The infallible test by which conservatism of the genuine old stock may be distinguished from all imitations is found in its attitude toward wage labor. Some time ago the general counsel of a railroad pointed out that certain railroad engineers received more pay in a year than certain governors. That statement has been repeated many times, as though it were indubitable proof that rapacious labor is bringing the country to ruin.

"No doubt, if you should remind the general counsel that his own stipend is several times larger than that of the Chief Justice of the United States Supreme Court, he would reply that you were trying to compare two incomparable things; for a

Chief Justice, like a Governor, gets a large part of his compensation in the honor of the office.

"Nobody particularly rejoices because cotton farmers are getting but a meagre return for their labor in raising last year's crop. Genuine conservatism regards that situation as a misfortune, because if farmers have little money they can buy little, and it regards surplus money in the pocket of wage labor as misfortune, too.

"How far will labor be disposed to go in the direction of concessions that will help to bear the burden of economic strain now and in the future? asks one journal. If it would take an afternoon's stroll through any of those districts where great masses of wage labor are employed—say around the Pittsburgh steel mills—it would probably be able to forget a score or so of \$3,000 a year engineers long enough to get the right answer."

And last an extract from a late issue of the *Emporia Gazette*, Emporia, Kansas, entitled, "They Earn More."

"A Chicago railroad manager complains at the increasing scale of railroad men's wages, and protests that some division superintendents and foremen get smaller pay than engineers.

"There's a reason. It is because the high grade engineer earns more—gives society more value received than the superintendent or foreman. An engineer on the main line of a first class railroad has to use more intelligence, more courage, more quickly-balanced judgment, and hence a higher rate of brain power than the superintendent uses. The chief clerk or assistant foreman takes his chief's place. But a fireman cannot take an engineer's place, unless the fireman is an exceptional man.

"One of the finest things about American civilization is that it does recognize and does reward with something like an approach to justice the splendid services of these men at the throttle who hold hourly the lives and destinies of so many persons in their hands. Take the average railroad engineer; a fine, handsome, up-standing man, with a clear, keen eye, a firm jaw, a healthy body, a steady hand—what a man he is as he goes walking down the platform from his engine! America has produced many wonderful things. But nothing better than the American engineer."

There are many more extracts from our clipping bureau,

along the same line, viz: that comparing the incomparable has proven nothing.

As a matter of fact, the exhibits presented by the railroads show that slightly more than one-half of the engineers on Western Railroads earn less than \$150 per month and 64 per cent or more than five-eighths of all firemen employed earned less than \$100 during October, 1913, the busiest month in recent years for Western Railroads. These are the facts. Even, however, if it were true that any considerable portion of the engineers and firemen made the high earnings referred to, this would not be an economic sin or crime, or any reason against a further increase in rates of pay, provided, as is the case, they give full and adequate services and output for their earnings.

I believe it has been proven to you that the entire responsibility for the speed and handling of the train has, in the last few years, changed from the train crew to the man in the cab of the locomotive. The train is handled with airbrakes, and the man in the cab, on the train of today, is the man who, by his skill and ability, makes it possible for a railroad to earn revenue and pay dividends. You can have the finest railroad in the world, equipped with the best that money can buy, every known safety device, officered by competent men who know their business thoroughly, every other employe performing every duty required of him; yet that road does not earn one penny until the engine crew goes into the cab of the locomotive and starts the ponderous machine, moving the thousands of tons of freight and the hundreds of passengers to their destination. So, in the end, it is the men in the cab of the locomotive who carry the load of responsibility, and their responsibility is increasing every year. Each year the public demands better service. Each year examinations become more strict. Each year discipline becomes more rigid. There never was a time in the history of the railroad world when as much was required from the men, or as much taken out of the individual unit as now.

Much has been said about the great responsibility of the other men engaged in railroad service. Without desiring to detract one iota from the responsibility of the other men, I still maintain that it is the men in the cab of the locomotive who carry the load of responsibility.

The dispatcher handling the movement of trains, by train orders to tower men and operators, carries a load of responsibility; so does every employe connected with the movement of trains, but let the dispatcher make a mistake in directing the movement of the train or the towerman or station operator make a mistake in receiving or transcribing the order, the men in the cab of the locomotive are the ones who, in nearly every case, finally pay the price, and if not killed outright (as many are) are added to the human wreckage of the vocation for the organizations to take care of, throughout the remainder of their existence.

You have only to take a short trip out here to a suburb of Chicago, and visit the Home for Aged and Disabled Railroad Employes at Highland Park to see what that burden is. See men blind, men paralyzed, men utterly as helpless as a new born babe, men who have come out of wrecks with their poor bodies so burned by fire and scalded by steam and crippled, in the discharge of their duties, that some hardly seem to be a human being—men that you and I would not take care of for fifty dollars a day; men who perhaps were given a few headlines in the daily papers and a medal by the grateful passengers and then forgotten by both the passengers and the company, and left for the rank and file of their fellow workers to take care of the remainder of their dreary existence.

We desire to call your attention, with all the force at our command, to the fact that any class of service, or any business, should take care of its depreciation, its wear and tear. It is a well-established principle in all business of today that this must be done before any profit is taken. In the railroad service, they realize that enough must be saved from the earnings of the locomotive to buy a new one when the old one is worn out. What they have not learned is that the entire capital of the working man is his time and his muscle and brain power, which are daily being burned out and consumed until after a comparatively short time he goes to the industrial scrap heap as so much junk.

Instead of the railroads taking care of this wreckage of theirs, the whole burden is thrown upon the men to bear. Without any compensation to the men, their homes and savings are destroyed; and in addition we are left to take care of the human wreckage caused by the business. How heavy the burden is, the

world at large can hardly realize. For example, the following are correct returns from our Insurance Association for the past ten years, from January 1, 1905, to December 31, 1914. And we do not include in this the natural deaths at all. They are separate and distinct. I am giving you only the claims that we have paid for accidents.

Claims incurred by accidental deaths as a result of injuries incurred while in active service as a locomotive engineer, \$4,860,000.

Claims paid for blindness, same having been incurred while in the service or from causes originating while on duty as locomotive engineer, same period, \$845,250.

Claims paid for amputation of one or both legs from accidental injury while in the service as locomotive engineer, same period, \$604,500.

Claims paid for amputation of one or both arms from accidental injury incurred while in the service as locomotive engineer, same period, \$264,750.

Or a total of \$6,574,500 in ten years.

Those are for accidents alone.

Mr. Burgess: Mr. Stone, does that include firemen?

Mr. Stone: No, sir, that is engineers. I am reading now from the records of our Insurance Department.

In 1908, we put in an accident insurance, separate and distinct from our life insurance, and in the period since 1908 we have paid out \$776,437 for minor injuries, making the total we have paid out in these two policies in ten years of \$7,350,937.

I wired the office yesterday for the amount of insurance paid during the months of December, 1914, and January, February and March up to and including March 26, 1915; that is, since we have begun these negotiations. I find that since we have started on the arbitration of this present case these engineers have been called upon to pay out of their hard-earned money the sum of \$555,481.36, for accidents to their members; and that is a part of the price that we pay for the wreckage of the business.

I want to refer you to the two exhibits, Exhibits 43 and 44, prepared and presented by Dr. Harris.

On page 8 of that exhibit you will find the following—this is taken from the Medical-Actuarial Investigation. Lo-

comotive engineers have a death rate from accident which is eight times the normal. This rate is almost the same as that for locomotive firemen, which is nine times the normal.

And his general conclusions, on page 16 of Exhibit 43:

“There is a general agreement that the length of the working life of the locomotive engineer is from eleven to twelve years.”

All authorities agree upon that.

The report from our own insurance department shows the average term of insured life as being eleven years and seven days.

This report of Dr. Harris shows that fatal accidents caused 35 per cent of the deaths in the membership of the Brotherhood of Locomotive Engineers. Using the parlance of the West, 35 per cent of our members die with their boots on.

Taking up Exhibit 44 of the Firemen, Dr. Harris' exhibit shows that of the death rate among the firemen, 47 per cent of the total number of deaths they pay for are men who are killed on duty or deaths from accident—almost one-half.

This is no idle theory, gentlemen. It is bare, cold fact, and this money has actually been paid from the earnings of these men. Instead of the industry taking care of its wreckage, we are called upon to take care of it. In addition to that, we have already spoken of our Home for Aged and Disabled Railroad Employes, at Highland Park, Illinois; and in addition to these we have the widows and orphans of these men to take care of through our benevolent fund, in which we are paying out over \$65,000 a year.

When all this is taken into consideration, together with the few years which the man has in which to earn, and the hardships and hazards he endures, I say to you frankly, he is not paid half enough.

In our Exhibit 55, we show the financial losses imposed upon our men by the constant shifting of terminals to suit the whim of some operating official. These two organizations stand second to none in their love of country and love of flag. We have done everything possible to have our members become citizens of the highest type. We recognize the fact that the foundations of our nation rest in the homes of its people. No nation can hope to prosper so long as its people are homeless,

and we have always advised and encouraged our people to try and save money and have homes of their own, believing it made for a higher type of member; believing that a man who became a part of the community in which he lived and had his home and his interests, became a more useful member of society. We believe it gave us the highest standard of membership. And yet, after a man has spent the best part of his life, and has accumulated a savings account (and no one who has not been through the railroad game knows how hard it is for a railroad man to obtain these savings and what sacrifices it has cost him), he gets his home and has it paid for, probably at some terminal which the men have built up into a good little town with all the modern improvements, electric lights, water works and good sewerage. Then, just about the time they are ready to settle down to the enjoyment of the result of their savings, along comes some official who, by a stroke of the pen, destroys their property and makes it worthless, and orders them out to some new outlying point, perhaps with no sanitary conditions at all, and they have to start life all over again. About three moves of this kind, and you have destroyed the man's usefulness as a citizen.

This is one of the burdens the men are called upon to bear, part of the wreckage of the industry that the industry itself should bear.

In addition to this, we have tried to encourage our members in taking an interest in municipal and state affairs. We have tried to have our members on the school boards and take part in the municipal and civic interests of the communities where they live, to take an interest in local and state governments and in the enactment of good laws for the community. But by an arbitrary order they are now told that they cannot serve in any capacity in either civic or municipal affairs without leaving the service of the railroad company by which they are employed. One man in particular whom I recall was chairman of the school board in his town for the past fifteen years. Now, by a recent order of his company, he is debarred from holding office. So long as the employees were the Railroads' Man Friday it was all right. As soon as they began to think and act for themselves and to stand upon their rights as American citizens, it was all wrong. If the time has arrived when a man must give up his franchise rights, must give up all hope

of ever having a home, must become a wanderer on the face of the earth, then these things must in all fairness be given consideration in fixing a wage for his services, and the railroad which demands this from its employes should be compelled to pay the price for it.

Witnesses and exhibits have told of the long hours the freight men toil, hours that tax their energies almost beyond the limit of human endurance, hours that are inhuman. In the Railroads' exhibits, and in our exhibits you are shown the number of men who are on duty beyond 16 hours. Men being on duty 20, 30, and 40 hours is common. Men being on duty 40, 50, and 60 hours is not unusual; and the plea came back that it was only a small percentage of the total number of trains run. Gentlemen, no matter how conscientious a man may be, no matter how loyal he may be to the interests of the company for which he works, there comes a time when tired nature asserts itself, and the poor, tired, over-worked human machine refuses longer to respond to the will to keep on. Yet after 40 hours on duty just as much is expected and required of this tired, worn out brain and body as though it were the first hour on duty after a legal rest period, and no more consideration is given to one making a mistake under those conditions than if he had just come on duty.

Picture to yourselves, if you can, one of these tired, over-worked men struggling along in zero weather with a heavy tonnage train, trying to make a meeting point for the limited; every nerve and fibre of his tired body crying out for rest, and he fighting exhausted nature to keep awake. Do you think if the passengers on these limited trains knew the true facts they would sleep as soundly as they do in their luxurious berths? Gentlemen, the picture is not overdrawn. If the public could only know the true situation, it would not tolerate it for a single day. The greatest tragedy of the railroads has not yet been written. It is still to come; and it will be caused by some over-worked and exhausted engine crew that because of long hours on duty forgot. Back of it all will be the man really to blame, the over-ambitious official who wants to make a record by hauling just a few tons more per train.

Much has been said about the Hours of Service Law and its enactment for the benefit of the employes. While it is true that the railroad employes advocated and supported the measure, yet

neither the title of the Act nor the numerous decisions of the courts on it state, or imply in the remotest degree, that the comfort and salvage of the employes were the prime reasons for its enactment. In fact, the contrary is true, and it would, of course, be impossible for me to find language to show the real meaning of the law in as clear a manner as the decisions of the courts themselves. I am sure the neutral members of the Board, who are learned and able jurists, will indulge me for a few minutes in referring to a few of the many decisions that have been handed down.

In the case of the St. Louis, Iron Mountain & Southern Railway Company vs. McWhirter, the court said:

“The aim of the statute is the protection of the lives of employes of railroad companies and also the lives and property entrusted to the railroads as common carriers. It recognizes that there is a limit to human endurance.”

I desire to call the attention of the counsel for the railroads to the fact that we did not have the “limit of human endurance” copyrighted. The courts used the language long ago, so it was not ours.

“It recognizes that there is a limit to human endurance and that hours of rest and recreation, as well as the use of good machinery and appliances, are needful to the health and safety of men engaged in the hazardous work of railroading, and that the benefit it is intended to confer will better enable them to serve their employers and promote the ends of commerce. The application of the provisions of the statute may sometimes bear harshly upon an offending railway company, but on the whole their just enforcement in all proper cases is bound to be promotive of the public welfare.”

(Decisions construing Hours of Service Acts; published by order of the Interstate Commerce Commission, page 92.)

The Federal Hours of Service Act has a very important bearing on three articles in our proposal, namely:

Article 4. Continuous time for engineers and firemen in switching service.

Article 5. Pay for service rendered in preparing locomotives.

Article 7. Continuous time. Engineers and firemen tied up between their terminals will be paid continuous time, no deductions to be made for time tied up.

We have just read the language of the court in defining the purpose and object of the Act; now let us see what the courts have said about meal hours.

In the case of the United States vs. The Northern Pacific Railway (Page 539, Federal Reporter, April 21, 1914), Judge Rankin said, in part:

"Nor should the brief period allowed for meals be deducted from the time of service in order to break its continuity. The statute uses the terms, 'sixteen consecutive hours' and 'continuously on duty': and while, literally speaking 'consecutive' means succeeding one another in regular order, with no interval or break, and the word 'continuously' means substantially the same, yet it is manifest that no such strict or literal meaning of these expressions was intended. The purpose of the statute, as indicated by its title, is to promote the safety of employes and travelers upon railroads by limiting the hours of labor of those who are in control of dangerous agencies, lest by excessive periods of duty they become fatigued and indifferent and cause accidents leading to injuries and destruction of life."

Omitting a short part that has no bearing on this case, and reading further:

"I cannot believe that by the expressions 'sixteen consecutive hours' and 'continuously on duty' Congress intended to include only those who are employed for sixteen hours without interruption for meals or otherwise. Congress was, no doubt, mindful of the fact that no laboring man works for sixteen consecutive hours, or is on duty continuously for that period, without food or drink, except in case of dire necessity, and the Act should not be so restricted. It may be said that trainmen are on duty and subject to call during meal hours, but this is only because such is the will of their employers. If a railroad company may relieve its employes from service during meal hours, it may also relieve them from service every time a freight train is tied up on a side track waiting for another train, and thus defeat the very object the Legislature had in view. The brief interruptions for meals were 'trifling interruptions' in the language of the court in the Atchison case."

While the language employed in the different decisions handed down is not always the same, yet in no instance has any court disturbed the broad general principle, and we, therefore, hold that in a spirit of equity, if for no other reason, in seeking

pay for continuous time when tied up between terminals, the men are fully justified.

We hold the employes have contributed their share when they suffer the privations of sleeping on the ground or on the deck of a locomotive,—not a bed in the Blackstone Hotel, on a deck of a locomotive,—or eating food from a dinner pail after it has become stale because of being carried on a hot locomotive for fifteen hours before being eaten; without being called upon to bear the pecuniary loss due to their being passed by other crews in the same service, and thereby being held away from the home terminal longer than they would have been held otherwise. Surely the Congress of the United States never intended to exact a monetary loss from locomotive engineers and firemen because of a law enacted for the purpose of insuring safety to the general public. Certainly the railroads cannot hold the law is unfair or unreasonable, for our attention has been called to the fact by Mr. Park that he acknowledged to the Committee on Interstate and Foreign Commerce, House of Representatives, at the hearing in regard to Senate Act 1533 and H. R. 24375, that the bill as amended was satisfactory, and at that time he was speaking for all the Harriman Lines: and this conclusion is further strengthened by the testimony of Mr. Daniel Willard, before the same Committee, where he stated in part as follows:

“We consider it on the Burlington good practice to so load an engine that when on a uniform grade it will make a speed of twelve to twenty miles per hour. We think the train is getting along in an economical way if it is so loaded that it will run from twelve to eighteen miles an hour after it is started, and between stations. We find, also, on a single track railroad, on a train loaded so that it will make between fifteen and eighteen miles per hour between stations, after deducting necessary delays from taking on coal and water, and meeting trains, a uniform rate from start to finish of ten miles an hour will be shown, so that fifteen hours would be consumed from start to finish for a 150-mile trip, and if we did that, and had only sixteen hours, say, certain things might happen which would make it necessary to relieve the men.”

Taking the remarks of Mr. Willard in connection with the statements of Mr. Park, relative to the location of the terminals, wherein he states the terminals were fixed in this way by nature and cannot be changed, we are forced to the conclusion that

in order to obtain an economical operation, it is necessary to load the trains as described by Mr. Willard, which compels the engineer and fireman to consume the period allowed by law in order to pull this heavily laden train, and if the time expires before reaching a terminal, they are forced to take the needed rest in accordance with the statute.

This, of course, entails the loss of eight hours' time, in addition to the hardships sustained, due to their inability to procure proper nourishment or sleeping accommodations, as heretofore described. And, in event they should be fortunate enough to secure a tie-up at a point where there are accommodations, it goes without saying that they would be put to additional expense, thereby suffering a monetary loss, without being permitted to participate in the increased earnings because of the heavy trainload. And we believe that it is neither reasonable nor fair to exact this toll from the engineers and firemen for the purpose of enriching the coffers of these great transportation corporations.

When our request pertaining to continuous time in switch engine service is considered, we believe that our position is even stronger, if such position could exist, as it has been repeatedly held by the courts that a short intermission for meals does not constitute a release from duty.

In the case of the United States vs. Chicago, Milwaukee & Puget Sound Railway Company, the court said:

"The train crew was allowed from thirty to forty-five minutes for breakfast, and about one hour each for the mid-day and evening meals. At meal time the crew was relieved from duty and a watchman placed in charge of the engine. If the time allowed for meals be deducted from the time allowed for service, the crew was not employed for sixteen consecutive hours. But if these deductions be not made, it was admittedly employed for a longer period than allowed by law."

And the Court held that this time allowed for meals should be counted as a part of the hours of service during which the crew was engaged.

The Chairman: We will now adjourn until tomorrow morning.

(Whereupon, at 5 o'clock P. M., April 1, 1915, an adjournment was taken to April 2, 1915, at 10 o'clock A. M.)

IN THE MATTER OF THE
ARBITRATION
between the
WESTERN RAILWAYS
and
BROTHERHOOD OF LOCOMOTIVE
ENGINEERS
and
BROTHERHOOD OF LOCOMOTIVE FIRE-
MEN AND ENGINEMEN
under the Act approved July 15, 1913, by agree-
ment dated August 3, 1914.

Chicago, Illinois, April 2, 1915.

Met pursuant to adjournment at 10:00 o'clock A. M.

Present: Arbitrators and parties as before.

Mr. Stone: When we adjourned, Mr. Chairman, we were discussing the question of long hours; but if I may, I would like to refer back for just a moment to the question of moving terminals. I have here a series of photographs. I have no desire to present them as an exhibit, because that day has gone by; but I would like the Board to see them. This is a new terminal that has just been established by the Southern Pacific at Gerber, and it is to be the new passenger and freight terminal for the Sacramento and the Shasta division. The crews at the present time live in Sacramento, in Roseville, and a few, I believe, live in Red Bluff, all three first class towns. These photographs show where they are going to live. I want to call particular attention to the new hotel. That was about seven feet under water when the photographs were taken. That is the New Blackstone. And this is not an unusual occurrence. This is a very low spot on the Sacramento River, where this ground overflows every year; and there is where they expect our people to live, giving up their homes in high class towns where they have all facilities, and going to live in a place like that.

At the close last night I had just finished reading an extract from the court decision in the case of United States vs. Chicago,

Milwaukee & St. Paul Railway. This opinion seems to be strengthened by the decision of the Supreme Court of the United States, wherein Mr. Justice Holmes, March 13, 1911, said, in part:

"A trifling interruption would not be considered, and it is possible that even three hours by night and three hours by day would not exclude the office from all operations of the law, and to that extent defeat what we believe was its intent."

Now, gentlemen, when you take into consideration the fact that the engineers and firemen employed on switch engines have no knowledge as to whether they will be employed during the noon hour or not, until the very last moment when they are directed as to the course they will pursue; therefore, an engineer or fireman might be living in close proximity to his yard, and yet be denied the privilege of enjoying a home meal, or even advising his wife as to whether she should prepare a meal or not. Hence we find under these circumstances the company has a preferred lien upon all of the time of a locomotive engineer and fireman, with the possible exception of the eight or ten hour period provided by the Federal Statute; and we think if they are subject to orders of this character they should be clearly and unquestionably entitled to compensation for the time specified. In fact, the courts have held that an employe is on duty when he is at his post in obedience to rules or regulations of his superior, and ready and willing to work, whether actually at work or waiting for orders, or for the removal of hindrances from any cause.

Take the case of the United States vs. Chicago, Milwaukee & Puget Sound Railroad Company, 195 Federal Reporter, 783. Quoting from the Southwestern Reporter for April 15, 1914:

"The agreed facts showed that the trainmen were required to report for duty thirty minutes before the departure of trains, and were allowed fifteen minutes after the arrival of trains at destination to inspect. The question for decision, as stated in the opinion, was, does the statutory limitation of time of continuous service applicable to engineers, firemen, conductors and brakemen employed in the operation of trains, include or exclude the time on duty preceding and subsequent to the time of service in actual operation of trains between the terminal points at which their runs are commenced and ended. The court said:

“ ‘An employe is on duty when he is at his post in obedience to rules or requirements of his superior, and ready and willing to work, whether actually at work or waiting for orders, or for the removal of hindrances from any cause.’ ”

Again, in the *United States vs. The Illinois Central Railroad*, 180 Federal Reporter, 630, the question was whether an engineer who was required to and did report for duty before the time fixed for the departure of the train was engaged in service within the meaning of the Act, and the court said:

“In my opinion this man was on duty within the meaning of the Act, from the time he went there and commenced to supervise or overlook that engine in preparation for the trip. It does not make any difference whether he was paid for this time or not. That was the time his work and the strain on him began. The work of an engineer, an employe of the railroad, begins when under the rule of the company he is there and is at work in connection with the preparation of the engine or the moving of the train.”

Therefore, we feel that we are not unreasonable when we contend that if the railway companies insist on having a lien on the time of the engineers, thereby prohibiting them from following the usual and ordinary practices of mankind, they should at least be willing to compensate them for that time, and we do not consider that we are relieved from duty when we must answer at all times the call of the railway company.

And the same principle is found in the decisions of the courts relative to the time required to prepare the locomotive for its run; just as I have read, and you will note the court particularly rules that the work of an employe of a road begins when under the rule of the company he reports, half an hour before the time scheduled for the departure of his train, for the purpose of overlooking or supervising the preparation of his engine. During the time he is performing this preliminary duty he is on duty within the meaning of the Federal Hours of Service Act. If the decisions of the courts are correct—and we do not dispute that fact in the slightest degree—then we have clearly shown that the men whom we represent are on duty during this period, and certainly no reasonable employer can consistently contend that they should not be compensated for the time that they are on duty.

We have, to some extent perhaps, wearied the Board in referring to these decisions, but it seemed that it was essential and proper, because they are not the words of the engineers and firemen, but rather the words of the courts of this land relative to an Act that is held to be of vital importance not only to the employes, but to the American public; and the long hours that the engineers and firemen are required to work for a meagre compensation are a disgrace in any civilized country, and in our judgment entirely unnecessary. This is not our opinion alone, but is the opinion of the House Committee, who in their report stated in part as follows:

“The infliction of a penalty of a few dollars or even a few cents, is an inducement to the railroads to disregard the Hours of Service Act, as it would be much more profitable to pay the fine than to observe the law, and with a service time of sixteen hours it is vital, as all will be agreed that violations of the law should be diminished and not encouraged.”

Mr. Burgess: Pardon me, Mr. Stone. Is the House Committee referred to, a Committee of Congress?

Mr. Stone: Yes. In our opinion, if this Board should grant continuous time in switching service, and recognize the justice of our claim for compensation while preparing locomotives, and allow time and one-half for all time in excess of the basis agreed upon, namely, time in excess of ten hours in all freight or switching service, and time in excess of the basis in passenger service, which is found by dividing the number of miles run by twenty, the continuity of long hours would be known by memory only, and this would continue to attract to the service the class of men so much desired by all the people who are interested in the safe operation of the railway; and we believe there cannot be the slightest doubt in the minds of any of the gentlemen composing this Board as to the truthfulness of our statement relative to the long hours that the men are required to serve, for if we cast aside all the testimony of the witnesses for the Employes and ignore all their exhibits, we are forcefully reminded that one of the last exhibits furnished by the Railroad Companies clearly and absolutely confirms our contention; in fact, uncovers the true situation, for the exhibit clearly reveals the fact that engineers on the Chicago, Milwaukee & St. Paul Railway had worked a total of fourteen hours

per day for 365 days in the year; 4,755 hours in switching service in one year. This not only deprives him of all social life, all home associations with his family, but it also deprives him of any of the benefits of religious worship for even one day in the year. Think of it, gentlemen of the Board, an American citizen, in an enlightened country, forced to labor fourteen hours per day for 365 days in the year. Gentlemen, the Humane Society would not allow you to work a government mule that many hours, without having you arrested.

This staggering condition is appalling, and is much worse than the conditions found in the steel mills at Pittsburgh by those investigating the conditions there for the United States Government, which not only shocked the American people, but led to a revocation of the practices, and the effort of the government was put forth in behalf of a people who had migrated from the Old Country to America and as yet were unable to speak the language of this country. Yet, we find in the great city of Chicago, citizens deprived of every ordinary and usual comfort enjoyed by mankind, in order that the great transportation lines may enjoy greater net revenue. And this condition is not confined to Chicago alone; the same facts and conditions could be found upon nearly every line, a party to this controversy.

We have heard quite a good deal of discussion about the poor roads, or the roads that would be in bankruptcy if our requests were granted, or the roads that showed a deficit in their operations last year, and they would lead us to believe that the financial condition which some of these roads are in, is such that it would be sure to make them bankrupt if their operating expenses were increased. While we should not be unmindful of the fact that the railroads have made no general denial of their financial ability to meet the increases which may be granted by this Board through their counsel, it is also a fact that the three experts who spoke for the ninety-eight Western railroads, did testify that the railroads could not afford to grant our requests.

Many of the large trunk lines control the smaller lines tributary to them, which are perhaps operated at a loss on account of their strategic position, or to prevent invasion of their territory by a competing line. We invite the attention of the Board to the undisputed evidence of the complainants, wherein it was

clearly shown, by Exhibit No. 72, presented by Mr. Lauck, that when allowances were made for intercorporate relations, or for the small roads which were owned by prosperous roads, and eliminating roads like the St. Louis & San Francisco, the Rock Island, and the Alton, which were wrecked by financial pirates, there were really only two roads in the West showing a deficit after the payment of fixed charges, namely, the Trinity & Brazos Valley and the Missouri & North Arkansas, which constitute, together, only .72 of one per cent of the mileage in the Western territory; and it seems significant to recall the fact that, as yet, that statement remains unchallenged, counsel for the railroads even declining to cross-examine our witness.

But if that fact be entirely disregarded, we should not be unmindful of the principle laid down by the immortal Lincoln, in which he said:

“Labor is prior to and independent of capital. Capital is only the fruit of labor and could never have existed if labor had not first existed. Labor is the superior of capital and deserves much the higher consideration.”

You will find the same principle has been enunciated by several of our most able jurists, and the principle of paying the going wage in common competitive territory is well established.

Following are quoted a few excerpts from decisions involving this principle:

Ames, et al. vs. Union Pacific Railway Company, 62 Federal Reporter, page 7 (April 5, 1894). U. S. Circuit Court of Nebraska.

“Railroad companies—Receivers’ changes in regulations and wages of employees.

“Syllabus: Previous to the appointment of Receivers of a company operating an extensive railroad system, the relations between it and its employes, and their rates of wages had been determined mainly by certain rules, regulations and schedules which had remained substantially unchanged for years, and which were the results of conferences between the managers of the railroad and representatives of organizations of the employes. One of such rules and regulations was that no change should be made in them, or in the rate of wages without certain notice to the organization whose members would have been affected.

“HELD: That the schedules of wages must be presumed to be reasonable and just, and that the new and reduced schedules, adopted by the Receivers without notice to the employes or their representatives, would not be approved by the court, although recommended by a majority of the Receivers; only one of them being a practical railroad manager, and he testifying that the new schedules should not be put in force without some modifications, and it appears that the allowances made by the existing schedules were in fact just and equitable when all conditions were considered.”

The decision is by Judge Caldwell, and his language, beginning at the top of page 13, is significant. It reads as follows:

“The Court shares in their anxiety to have an economical administration of this trust to the end that those who own the property and have liens upon it may get out of it what is fairly their due. But to accomplish this desirable result, the wages of the men must not be reduced below a reasonable and just compensation for their service. They must be paid fair wages, though no dividends are paid on the stock and no dividends paid on the bonds.”

Clearly showing that the claim of labor came first.

Again, the case of U. S. Trust Company of New York vs. Omaha & St. Louis Railway Company, 63 Federal Reporter, page 737.

“Syllabus 1: Railroad in Receivers’ hands, reduction of wages.

“Where a Receiver petitions for a reduction of employes’ wages, the employes concerned should be notified and accorded a hearing.

“Syllabus 2: Same.

“Where the wages paid to faithful and competent employes of a railroad in the hands of a Receiver are not shown to be excessive for the labor performed, and are not higher than the wages paid to like employes on other lines of similar character, operated under like conditions, through the same country, the court will not, against the protest of its said employes, reduce their wages because of inability of the railroad to pay dividends or interest, even though present opportunity exists for securing other employes for less wages.

“Syllabus 3: Master’s Report—How far conclusive.

“The Master’s conclusions on such petitions are of fact, and are not necessarily to be accepted by the court.”

Decision by Judge Woolson:

“The Receiver presented to the court a petition recommending certain reductions in the rates of pay of different classes of employes, requesting the court to take action thereon.

“The court referred the hearing to a Master and directed him to take proofs upon said petition and also as to what wages are now being paid on other lines of similar character operated under like conditions through the same country, and to report the same to this court.”

The following language by Judge Woolson appears at page 740:

“One of the recognized tests in this matter is that of comparing the rates of pay as proposed with those in force upon ‘other lines operated through similar country and under like conditions,’ so far as the same can be done.”

Beginning at the bottom of page 741, the following language appears:

“The retention of faithful, intelligent and capable employes is of greatly more importance than temporary decrease in earnings, or present ability to secure other employes at reduced wages. The court is not justified in discharging trusted, satisfactory employes, or compelling their retirement from the service of the court because present ability to employ others at reduced wages would turn a present operation at a loss into such operation without loss. If, as has already been determined, the wages now paid are not in excess, in the particulars considered, of the wages paid by other roads running through the same general country and operating under practically similar conditions, and the wages now paid on this line are not excessive for the service performed, the reasons presented for a reduction, by the court, of those wages, and against the protest of the men affected thereby, should be weighty, indeed, and should appeal with a most convincing power, before the order for such reduction is entered. The evidence shows that some of the employes with families to support are scarcely able to maintain them on present wages. ‘The highest and best service cannot be expected from men who are compelled to live in a state of pinch and want.’

“That the rate of wages of the employes of a Railroad Receiver is to be judged by the same standards as other roads is shown by the language of Judge Taft (ex-President of the United States), in the case of *Thomas vs. Cincinnati, New Orleans & Texas Pacific Railway Company*, vol. 62, Federal Reporter, page 17.

“Near the top of page 19, Judge Taft uses the following language:

“ ‘There is no definite evidence on behalf of petitioners that the rate per hour paid by the Receiver since the order of reduction went into effect is less than that which is paid by railway companies having shops in this vicinity. On the contrary, it seems from affidavits filed by counsel for Receiver that the present rates per hour are quite equal to any paid in this market.’ ”

“Again, on page 20:

“ ‘We come now to the trainmen. No evidence has been produced to show us that the engineers, firemen, conductors or brakemen on passenger trains operated by the Receiver are paid any less wages under the order of March 27th, than the same class of employes on roads similarly situated.’ ”

Clearly drawing the comparison between other roads in the same given competitive territory.

Again, in the Arbitration proceedings on the Georgia & Florida Railway, the Hon. Stanton J. Peelle, who for twenty-one years was Chief Justice of the United States Court of Claims, stated, in part, as follows:

“That the road is not making enough money to meet its operating expenses is unquestioned, but we do not deem it necessary to analyze the figures tabulated with respect thereto, or whether they show a loss in operating expenses, as understood in railroad accounting, or whether the receipts are inadequate to meet the operating expenses, plus taxes and interest on the indebtedness, the same cannot be considered by the Board as a controlling element in fixing the reasonable rate of wages. The employes have first claim upon the earnings of the road for a reasonable wage to be determined not by the financial condition of the company, but by the rates paid by the other roads in the same section of the country for like services.”

The Award of the Board of Arbitration in this matter was

appealed and a hearing granted before United States Judge Shepard, who upheld the decision of the Board of Arbitration. The case was then appealed to the United States Circuit Court of Appeals, and the decision of Judge Shepard was sustained.

This principle was established many years ago, and we would refer you to the decision of Circuit Judge Caldwell, and District Judge Riner, in the Circuit District of Nebraska, in 1894, which states, in part, as follows: (Federal Reporter, Vol. 62, page 7.)

"In the opinion of the court, the allowances made by these schedules now in force are just and equitable. The employes with families to support are seldom more than a few days' wages in advance of want, and if their present wages were merely reduced, they cannot live. The highest and best service cannot be expected from men who are compelled to live in a state of pinch and want. A court of equity will not pursue a niggardly and cheese-paring policy. An order will be entered in the District Court of Nebraska continuing the present schedule. An order will be entered in the District Courts of Colorado and Wyoming, to conform with the order now entered in the District of Nebraska."

Clearly establishing the practice all the way through, gentlemen, that roads in the common competing territory should pay the going wage, regardless of the financial condition of the road.

We have had mentioned here a time or two the question of Railroad Relief Associations. Fortunately they are very few. Of the few, the number that do exist are just that many too many.

Regarding the question of the so-called Voluntary Relief Associations. Since the English language was first used, there has never been a greater abuse of the word "voluntary" than its use in connection with the railroad relief associations, of which we have heard during these hearings.

We would simply ask that you read the statement of Mr. H. L. Bond, General Counsel for the Baltimore & Ohio Railroad, Page 24, Volume 2, Report of the Commission on Employers' Liability and Workmen's Compensation. Also, Mr. F. D. McKenna, Counsel for the Pennsylvania Railroad System, pages 1351 to 1371, inclusive. We ask your special attention to the

paragraph at the bottom of page 1360, wherein it shows how it is voluntary; and then the quiet, unseen coercion that stands back of it. If you do not take out and carry the relief, you are an undesirable, both in obtaining employment and in retaining your position. There is nothing philanthropic about it. If ever there was an institution conceived in sin and born in iniquity, that is the relief departments, fortunately now in effect on only a small percentage of railroads. It is the greatest piece of legitimate sandbagging in the world. For every dollar the relief department has paid out to its members, it has gotten back five dollars as a return by using it as a bar to recovery for personal damage.

For years and years, men employed on the roads where the relief existed, were killed and crippled, and they could not recover because the road stood back of the relief department, while employes on other lines in the same territory could and did go into court and recover. All this in addition to the fact that it brings another physical examination (more rigid in many instances than the government requirements for the army and navy), the rigid discipline, and the greatest curse of the railroad man's life, the age limit. And all three are chargeable to the relief associations. That, and the pension system.

In regard to the pension systems that have been spoken of at times: several of these pension plans have a few good points, in that they provide for some of the wreckage of the vocation, and take care of engineers who through sickness or misfortune are unable to live without assistance. They are objectionable in that they also bring the physical examination and the age limit. I know of no plan that requires less than thirty years' continuous service; many require more. The Baltimore & Ohio, which controls the Baltimore & Ohio Chicago Terminal, has just increased its requirements from thirty-eight to forty years' continuous service. This makes it impossible for an engineer who seeks employment in middle life to obtain employment where the pension system prevails. It compels men to submit to unjust treatment in the hope that in a few more years they will get to the retiring age and be pensioned.

A glance at the very small percentage of the pensioned employes will show what a delusion this old-age pension really is.

When the present Western Wage Movement was at a crisis,

and a strike vote had been taken on the ninety-eight railroads involved, several of our old, retired engineers were sent for and notified to hold themselves in readiness to act as strike breakers, in case the engineers went on strike, the same old club of the loss of their pension being held over their heads, in case of refusal.

We have heard discussed several times the stock in trade quotation of Mr. Trenholm, "An honest day's pay for an honest day's work." What is an honest day's pay? The question is one that has a far-reaching effect, not only upon the individual toiler, but upon the home life of the community and country in which he lives. From our standpoint, an honest day's wage should be a wage that enables the American workingman to live as he should live; a wage that will enable him to have a home of his own; a wage that will enable him to educate his family; a wage that will not only enable him to live while the wage is being earned, but that will enable him to lay up a competence for his old age, when he is no longer a wage earner; a wage that will tend toward a higher standard of citizenship; a wage that should be measured in all things by the American standard of living and not by the standard of living of those emigrants who are daily coming to our shores and who show in their pinched faces what poverty and low wages and mere existence will do for any class of people.

We have shown you by the other exhibits the few years of life that the man has to sell in the railroad service. All authorities agree that the engineer has less than twelve. In those twelve years that he has to sell, he must not only live and acquire, but he must lay up a competence so that he can take care of himself in his old age, when he is no longer a wage earner, and when he has been thrown on the scrap pile as so much worn out junk.

And now, gentlemen, I come to the subject of surprise tests. There are times when I feel the need of words other than those in my vocabulary, and this is one of the times. If I was familiar with all the language on earth, I could not find words strong enough to express my personal opinion of this question. It should be clearly understood that the two labor organizations, parties to this arbitration, stand second to none in their desire to have every safeguard possibly thrown around their hazardous

calling. Anything that will promote a higher degree of safety to life and limb of employes and the public will be given a hearty co-operation.

Our interest in any measure that will conserve human life is evidenced by the heavy expenditure of time, energy and money by these two organizations in securing information and legislation, both state and national, which are in the interest of safety.

When we stop to consider that every measure introduced in the interests of safety was opposed by the railroads—measures such as power brakes, automatic couplers, standardization of height of draw bars, location of brake staffs, ladders and grab irons on cars, boiler inspection, improved ash pans, power headlights, and the Hours of Service Law—in fact every measure of every kind that was proposed by the men, who were the actual sufferers, it seems almost farcical to hear the counsel for the railroads and the different officials of the companies here represented attempt to defend the practice of surprise tests on the ground that such tests are necessary if discipline is to be maintained and safety in railway travel is to continue.

It is a well established doctrine that the railway is a public highway, and every man, woman and child who may at any time use this method of transportation is vitally interested in anything that will contribute in the slightest degree to promoting safety and conserving human life. Leaving out all questions of sentiment and humanitarian considerations, there is a selfish interest involved that alone would compel these two organizations to support every safety measure, because it is their members who are killed and injured, and whose insurance they have to pay, and whose families they have to take care of. The counsel for the railroads would have you accept his theory as to how the desired safety can be obtained. Unfortunately, his statements rest entirely on theory and what someone else told him, while our objections to this practice are made by men with actual experience, who will have to pay the price in the event of an accident.

The practice of conducting surprise tests which are complained of here, is a disgrace and should be made a crime punishable by law. It serves no purpose insofar as safety is concerned. It merely gratifies the whim of some local official who is desirous

of displaying a little brief authority. On the other hand, it is dangerous in the extreme and is such a shock to the nervous system that it takes weeks—perhaps years or never—before the men in the cab recover from its effect. The result is you have a man in the cab of a locomotive, on a fast passenger train, for the rest of the trip, who is a nervous wreck and totally unfitted to perform his usual duties.

Gentlemen, there will always be three jobs waiting for the fool killer: one is the fool who rocks the boat; one is the fool who cries “fire” in a crowded theatre, and greatest of all, is the fool who turns a switch light red in the face of a fast passenger train, just to see what the engineer will do, with the result that the engineer lives a lifetime in about two seconds. If ever you have had the sensation of a heavy shock of some kind, just as if someone had taken your heart in his grasp and squeezed it tight until you were on the point of suffocation, and there was a flash of fire before your eyes, and then the grasp was loosened and your heartbeat jumped from seventy to two hundred beats per minute, then you can vaguely imagine what a surprise test really means to the man in the cab.

There is another side to it. I have just received a copy of a letter from one of our men who has just been subjected to a surprise test. I think every one of you who knows anything about the Union Pacific knows this man. It is Wood White, a man who has pulled the “Overland” for years, and I guess there are other engineers just as good, but I am sure there are no engineers any better.

The letter to Mr. White is as follows:

“Subj. Flattened Wheels—Train No. 2, Febr. 20th.

“North Platte, Nebr., Febr. 26, 1915.

“Mr. W. W. White,

“Engineer, North Platte.

“Dear Sir:—I am advised that train No. 2, Febr. 20th, while stopping for block signals at Alda, flattened wheels on rear end of observation car.

“Please give me a statement as to cause of flattening these wheels.

“Yours truly,

“J. McGraw, District Foreman.”

And here is his reply :

“North Platte, Nebr., March 4, 1915.

“Mr. J. McGraw,

“Dist. Foreman.

“Dear Sir:—The distant signal of the block mentioned in yours of the 26th ult. was not seen until within less than 50 feet of it, owing to the dense fog prevailing at the time. There was no hesitation on my part about applying emergency brake under those circumstances, and even then we barely stopped before reaching the home signal.

“Am not surprised that some wheels were slid flat, but am surprised they were not all flattened. As it was, the fireman and I got down on the step intending to get off in case engine passed the home signal. But, as it was only a test, there was no real danger of hitting anything, as we learned as soon as the stop was made.

“Nevertheless, it is just such uncalled for and unfair tests that, unnecessarily, put the white hairs in the ‘Old Timer’s’ head, and the extra lines of care in his face, just at a time when it seems as though the management would desire his later days be made as comfortable as possible.

“That kind of a test is not even fair to the Co., as it does not enable the engineer to make the stop without great danger to the equipment, besides the unnecessary alarm it creates, even to the passengers on the train.

“In freight service, such an application of the air would probably mean the parting of the train in several places, even though a drawbar did not fall to the track to cause a bad wreck.

“Sincerely yours,

“Wood W. White.”

Those are some of the things the men contend with. But this great question of the safety of the traveling public has another aspect.

We would respectfully invite the attention of the Board to the last report of the Interstate Commerce Commission, page 54, wherein it states that there were two collisions during the year traceable to the failures of engineers and firemen to obey signal indications.

Gentlemen, when you take into consideration the great number of trains run, and the thousands and thousands of signals

that are in service, I consider that a wonderful record. And while we cannot prove it, of course, there is no question in our minds but what one of these two men was dead in the cab of his engine, because he passed three signals of danger before he had the collision; and we are positive, from knowing the man, that he had either fainted or was dead, because he had been one of the most careful men in the country.

Also, beginning on the same page of this last report of the Interstate Commerce Commission, on page 54, the Board may find a very severe arraignment of the railways by the Interstate Commerce Commission for failure to employ safeguards by the proper rules and supervision, and it is only fair and proper to compare some of the statements of the Interstate Commerce Commission with the testimony that has been introduced at this hearing to establish the fact that all the accidents, or nearly all, are traceable to the negligence of employes. We find that the casualties resulting from overhead and side obstructions alone, and from falling off and getting on cars, occasioned during the past fiscal year, are as follows: 643 deaths and 16,428 injuries to employes.

Another thing, where you want safety first: during the fiscal year there were 10,020 violations of the Safety Appliance Act transmitted to the several United States attorneys for prosecution, and there have been 120 cases decided in favor of the Government. During the year the carriers conferred judgment on 483 counts, resulting in penalties amounting to \$78,700. During the same year there was an aggregate violation of the Hours of Service Act to the extent of 2,871 cases. Of the 121 counts argued in the Circuit Court of Appeals, 98 were decided in favor of the government, and penalties aggregating \$162,422 were assessed.

The penalties assessed for violation of the Ash Pan Act were \$1,600. So we have before us a remarkable situation, inasmuch as it has been the purpose of the Managers to point out to the Board of Arbitration that their only object in making surprise tests was to insure safety, and yet we have here the government of all the people obtaining penalties from the carriers to the extent of \$242,722, for violations of laws deemed necessary and proper, in order to secure that same safety.

I also desire to call your attention to the fact that, in view of the Hours of Service Law being an express measure for the safety of the people and employes, during the past fiscal year, 1,194 railroads filed complete reports. Of this number 739 certified each month under oath that no excess service had occurred on their respective lines. The remainder, 455 carriers, reported an aggregate of all classes of excess service of 165,305 instances in which employes were on duty for longer periods than permitted by statute. The question naturally arises, if 739 railroads can comply with the Federal law, and there are no violations of the Hours of Service Act by those railroads, what good reason can be advanced why the others should not obey the law in like manner; particularly so when they are so deeply interested in the safety of their employes and of the traveling public.

Much has been said about, and much adverse criticism has been placed upon the engineers of the New York, New Haven & Hartford Railroad in connection with the bad accidents that have occurred there.

I might say in regard to that, that the accidents that occurred there were something that we all expected, and something the railroad employes on that line were satisfied in their own minds were going to occur. By my instructions, or by my suggestions, rather, the General Committee of Adjustment, months before the accidents occurred, had served a written notice, after talking it over three or four times with the officials of the company, telling them exactly what was going to happen. Here is what was said. The government investigation of these accidents developed the fact that the signal indications on that line were a source of grave danger. In fact, the General Manager stated that in foggy weather it was necessary to reduce the speed of trains to approximately twenty miles per hour. Instead of requiring a reduction of speed, or by order restricting the speed to that limit, the officers simply notified the employes that if loss of time occurred due to fog, no discipline would be administered. The result of this action was to pit one man against another, and the engineer who followed the dictates of his conscience and best judgment and good sense, was soon classified as an undesirable, because he could not

make the same time record as an engineer who was willing to take chances.

The Committee of the B. of L. E. on that road protested on several occasions against the system of signals in use, and, quoting the words of the government officials who conducted the investigation:

"In June, 1912, the enginemen on this road called the attention of the General Superintendent to the inadequate signals in use on various portions of the road, mentioning among other localities the line between Springfield and New Haven, stating that it was impossible to comply with the rules governing these signals and make the time required of them. A protest was also filed against the use of any signals to stop without distant or crossing signal indications being provided.

"This communication and protest was given but scant consideration by the officers of the road."

That is the United States Government talking. That is not some labor agitator; and that is their finding.

This formal protest was served by the General Committee of Adjustment of the Brotherhood of Locomotive Engineers several months before the wreck occurred. Who was looking out for the safety of the public on that occasion?

Take the government investigation of the Central of Georgia an allied line of the Illinois Central, in a wreck that occurred November 13, 1913, near Clayton, Alabama, resulting in the death of nine passengers, the injury of 389 passengers and one employe. Quoting from the government report:

"Inspection of the track was continued to a point one mile west of the derailment, and this one mile section of track contained sixteen broken rails."

Another portion of the statement reads:

"It required fifty-two new ties in repairing a section of track 210 feet in length."

I have here the government report, and I would like to show the Board the number of broken rails and how they were spliced.

Another portion of it reads as follows:

"In the 240 foot section of track immediately west of the point of derailment, twenty-four bad ties were found, and under one rail at the joint five spikes were pulled out by hand.

"In this 1,300 foot section of track, sixteen broken rails were found. One of these broken rails was in three pieces, the shortest of which was about two feet long. Three of these broken rails were spliced together in the manner shown in Illustration No. 5, short pieces of fish-plate being bolted through the track there."

That is the way the splices were made on the broken rail.

In the investigation of the accident occurring October 29, 1913, on the Frisco, resulting in the death of one of our best engineers and the injury of the fireman, this was one of the new steel trains, called the Meteor, and the superintendent testified that the track was good for sixty miles an hour. It was thoroughly demonstrated by the government investigation that the accident was due to bad track and rotten ties, and in concluding the report the inspector said:

"The existence of track conditions such as were disclosed by the investigation constitute a dangerous menace to the traveling public, and vigorous measures toward remedying these conditions should be taken at once."

If there is any doubt about the condition of the track referred to in this case, we would simply refer you to the photographs shown in the government report, which speak for themselves, and speak in tones much louder than I can use. When a government inspector can walk down the track and pull as many spikes out of the track with his hand as is shown by the photographs, it needs more than switch lights turned red to make traveling safe. You see the spikes pulled out by hand by the inspector, and the photographs made for the government.

These remarks could be continued at length, if it were deemed necessary to establish our position relative to surprise tests; but when you take into consideration the large number of trains run daily in the United States, and it is possible to find only two cases in a year wherein the engineer failed properly to observe the signal indications, there can be found absolutely no excuse for continuing such a barbarous practice.

In reading over the brief, and also reading over the statement made by counsel for the railroads, I was particularly impressed with the principle that he sought to lay down for the government of the Board of Arbitration, wherein he takes the position that this Board of Arbitration is debarred from award-

ing time and one-half for overtime by the award of other arbitration boards. If the railroads thus take the position that once a concession is denied by an arbitration, no subsequent arbitration may afford relief, we respectfully submit that they will force their employes to refuse to adjust matters by arbitration. Not only would this principle, if established, defeat the real purpose of the Federal Arbitration Act, but it would compel railroad employes to resort to other methods of protecting their interests.

The railroads are not consistent in their position that an arbitration once decided is decided for all time. When the Interstate Commerce Commission decided the Eastern Rate Case against the railroads, within three months they were back clamoring for another hearing of the same case.

I do not know whether the courts of our country have ever passed upon this principle here in the United States or not. I find in checking over the court action in the different countries that it has been ruled upon repeatedly by the Australian Supreme Court. Justice Higgins has repeatedly declined to be bound by prior awards, and his policy as he stated is to hear the entire case *de novo*.

You have heard about how well the men on these different lines are satisfied, and that they make no complaints. You have heard about the work of these salaried chairmen, what they do, going up and down the line, and you have also heard that it is these organizations that keep these men up on edge all the time and asking for more. You would be led to believe that these railroad organizations have become a serious menace to the welfare of the American people. It was only after these railroads employes had borrowed a leaf from the books of organized capital, and had organized themselves into a union and stood together for what they were justly entitled to, that there has arisen the somewhat sarcastic term as referred to in many of the papers, in speaking of this case, calling the Engineers especially, the "Aristocrats of Labor." Organization was all right when used by capital. It was all wrong when used by labor; and now the poison is being scattered among other classes of labor in the railway service, that the aristocrats of labor are getting the money which they, the underpaid and unorganized and unskilled laborer, should have. Never was there a statement made

that was further from the true conditions. Railroad companies never pay a cent more than they are compelled to pay. They are the only business in the world that do not even pay their honest debts. They capitalize them, to be a future drain on the revenues of the road. Instead of paying these half starved, unorganized employes an honest day's pay for an honest day's work, about which we have heard so much talk, they would yet today, if they had it in their power, reduce the pay of the organized employes to their level, and the only things that stand in their way and block their plans, are the organizations such as we represent.

It is true, gentlemen, that we are organized, and we have fought our way up to where the railroads, if they do not love us, at least have a wholesome respect for us. It is also true that we expect in the future to continue to have something to say about the rates and conditions of employment under which we work. Organized labor, in some form or other, called by some name or other, has come to stay, and it is a force that will have to be reckoned with in the coming years. Even then the worker is always at a disadvantage, and in the application of these rules and in the application of our schedules the men are at a disadvantage, because the operating officials are always both judge and jury in every case.

It is true there is an appeal from them. It is true when some man believes he has not been given just treatment or has not been paid what he is rightfully entitled to, that he can appeal on up, but it is an expensive luxury. It will probably cost one of these organizations \$100 for committee-work to collect \$1.30 worth of back time that some poor fellow is entitled to, and it is the endeavor of these railroads to make it just as expensive as possible, so you will not have as much committee work. The result is that men become bitter, and these happy families that you have heard talked about do not exist except in theory. Instead of these labor leaders like Mr. Carter and myself, going around agitating, instead of these salaried chairmen going up and down the line agitating the men, and trying to get them to ask for something more, the biggest job we have had in the last few years, and what has made our hair turn gray, has been keeping the brake on; because our men are getting down to the point that they are becoming desperate, and they have made

up their minds that they must have better conditions under which to work; and the reason for these questions coming back, and coming back, and coming back, is because they have never been settled rightly, and the men have never been given what they are justly entitled to, and have never been given a fair share of their productive efficiency, if you please.

It had not been my intention to take up in detail the brief and the argument of Mr. Sheean; but unfortunately, with his vivid imagination he has made some statements that I realize should be corrected, because if allowed to go unchallenged it will probably be thought that we give at least tacit consent to them, when we do not; and so it will be necessary to take up Mr. Sheean's brief and go through it and answer a few of the many statements made. And I only say, gentlemen, that after this Award is handed down, I hope Mr. Trenholm, the Chairman of the Western Conference Committee of Managers, will be just as liberal in his application of the Award in applying it on the different roads as he has been in saying what it means, on the witness stand. If he does, I am sure we will have no cause to complain.

On page 4 of the brief of Mr. Sheean, in the second paragraph, he says:

"As above indicated, the opening statement on behalf of the employes alleged changed conditions under which the men work in three particulars."

I want to read to you from the Award in the Eastern Conductors and Trainmen's Arbitration. This is the arbitration of the Eastern Railroads and the Order of Railway Conductors and Brotherhood of Railroad Trainmen, 1913, Volume 3, page 33 of the Award, the bottom paragraph:

"It is the prevailing opinion of the Board that, since the adjustment of 1910, there has been an increase in the cost of living, as already shown, equal to not less than 7 per cent. The employes' brief (page 24), in urging the importance of this factor, quotes President Brown of the New York Central Railroad as saying, in 1910: 'That is to say, if investigation shows the cost of living for an average family has, since the last increase in wages, increased say \$60.00 per annum, then an increase of that amount per annum is justified and should be made.' "

Again, the Board, in speaking of the increased responsibility, said in part as follows, on page 34 of the Award:

“By reason of the increased size and capacity of trains there has been some, if not commensurate, increase in responsibility, especially on the part of conductors.”

It goes without saying, if there was an increased responsibility on the part of conductors and trainmen, that there must have been an increase on the part of enginemen with the same train.

Again, on page 15:

“The prevailing opinion of the Board is that standardization as to pay and rules, as between the Eastern territory and Western territory, is at the present time impossible.”

Again, on page 15 of Mr. Sheehan's brief, in the next to the last paragraph, he uses the following language:

“The real question is: does the installation of the larger power on these railroads cause firemen to shovel more coal for the same money, or does the installation of such heavier power in fact reduce the amount of physical labor necessary to be exerted to earn one dollar?”

The real question from our standpoint is, what can be done, now that the limit of human endurance has been passed, for these firemen?

On page 42 of our Exhibit 51 Mr. Owens, Lehigh Valley Traveling Engineers' Association, 1910, page 257, said:

“There is so much coal consumed on the up to date locomotive of today that it takes in cases two firemen (and in fact I have known even three) going over one division with one engineer, and the latter may not see them again probably, in thirty days. I would be glad to know how we may expect to get co-operation or results from the engineer under such conditions. It will work out very well under the old conditions with the regular engine, and so forth, but unfortunately we have not those conditions today.”

On page 50 of the same exhibit, Railway and Locomotive Engineering, May, 1914, pages 161-163, said:

“The limit of human endurance in shovel firing has surely been reached.”

Again, on page 17 of Mr. Sheehan's brief:

“Briefly, this showing which Mr. Lanck said (record 2418)

he was at a loss to understand), is that on these nineteen railroads which burn coal exclusively the firemen shoveled 2.28 tons of coal for one dollar in compensation in 1909 as against 2.18 tons of coal for each dollar of compensation in 1913."

I want to read to you from the testimony of Witness Robertson, record p. 2909:

"Mr. Robertson: That would be my opinion, yes, but if you charge all the coal that goes up in the chute to the locomotive and then later charge that the firemen burn all the coal that goes up in the chute, and you have a railroad 100 miles long, and twenty locomotives on that railroad, each of them making a trip over the division a day, burning twenty-five tons of coal per day, you are charging 500 tons of coal to those twenty locomotives. If you paid the fireman \$10.00 a day for firing over that division, you would be paying \$200.00 every day for burning 500 tons of coal, or, for \$1,000, you burn 2,500 tons of coal, and if you start a fuel campaign, or any investigation, you find that there are $2\frac{1}{2}$ tons of coal being consumed in this terminal, at the roundhouse, in firing up these locomotives, and all of this has formerly been charged to this thousand dollars, and, through your fuel account you eliminate those $2\frac{1}{2}$ tons that you are losing at the terminal, or 10 per cent, you will then, without increasing the firemen's wages, show you are only burning 2,000 tons of coal, but still you are paying the firemen for the additional—"

Now, I want to read to you from the proceedings of the International Railway Fuel Association, of 1914. This is by Mr. F. W. Foltz, Fuel Supervisor of the Missouri Pacific Railway. It is from the report of the proceedings of the Sixth Annual Convention of that Association, held in Chicago, May 18 to 21, 1914:

"During the last few years railroad executives and staff officers have become awakened to the fact that a greater amount of fuel is consumed on locomotives at terminals than was generally supposed.

"Investigation develops that from 15 to 25 per cent of the total coal used by locomotives is consumed in roundhouses, and at terminals, while not actually performing service. The high percentage of terminal consumption on some roads can be partly attributed to lack of facilities in the way of roundhouses, cinder pits, coal chutes, track room, etc., and this feature should be

brought forcibly before our managements with view of securing needed facilities as quickly as possible.

“On many of our lines fuel departments have been organized to go into the question of fuel economy in all its phases, and the work of that department naturally embraces the terminals as well as the road performances of locomotives. * * *

“Locomotives should receive immediate attention on arrival and not be allowed to stand around for hours before fires are knocked (which is too often the case) consuming approximately 150 pounds of coal per hour on our large class power. * * *

“It is a practice on many roads to start fires in engines when mechanical work is finished. In checking up one of our large terminals (before Fuel Department was organized) I found sixty engines a day were fired up on an average of six hours and thirty minutes before departing. Irregularities of this nature have been overcome by the co-operation of the roundhouse and transportation forces.

“In order that the amount of time locomotives are kept under steam, when not performing service, may be reduced to the minimum, a daily report from each terminal on a form similar to the following will be of great value.”

I have made a slight computation on that one particular roundhouse. According to his statement these large engines standing there burn 150 pounds of coal per hour to keep the engine under steam. Sixty engines per day at 150 pounds per hour means 9,000 pounds of coal per hour required to keep sixty engines under steam. If they were fired up six and one-half hours before they were needed, as he states, they consumed 58,500 pounds of coal, or 28.25 tons required to keep those sixty engines under steam in the roundhouse for six and one-half hours. By reducing the time that the sixty engines are held under steam from six and one-half hours to three and one-quarter hours, we would have a saving per day of 50 per cent, or 14.125 tons at each terminal. This alone, if other roads were adopting the same policy as the Missouri Pacific has recently put into effect, would make the difference more than the difference complained of by Mr. Sheean, in Mr. Lauck's figures.

Another point in fuel economy. I quote again from the remarks of Mr. Foltz, on page 297 of these same proceedings

of the Sixth Annual Convention of the International Railway Fuel Association.

“Mr. Foltz: Mr. President, I believe that all has been said that can be said, but I will try to answer Mr. Hayes. He advocated that some fixed figure be brought to our management. About nine months ago we started running our passenger engines on our heavy runs from St. Louis to Kansas City, 283 miles, over two divisions. We had fairly good success, but some of our enginemen and some of our local officials objected. Finally we had a number of failures due to engines not steaming. The local officers suggested as a remedy that the engine be cut out at Sedalia as before. I was delegated to get busy, and we showed the management in figures in running these four heavy runs through, we made a saving of almost \$1,000 a month.”

At the same meeting, quoting from Mr. C. F. Ludington, at page 74 of these same proceedings, I cannot really think he meant this seriously. I am inclined to think perhaps it was a joke, but this is what he said:

“I was amused at the remarks of a prominent railway official not long ago, in which he said the general adoption of all fuel saving devices on our locomotives would in the course of time enable us to have engines leave terminals with empty tank, and have a full tank of coal on arrival at destination.”

I was particularly impressed with the statement of counsel for the railroads on page 20 of his brief, in regard to the fireman who receives an increase in pay automatically when larger power is placed in service; but I failed to hear him explain what became of the firemen thrown out of employment by the adoption of the heavy power when six heavy engines took the place of the work that nine engines formerly did.

All the way through, Mr. Sheean has opposed hypothetical cases, but these cases presented on page 20 of his brief appear to me to be just of that type. Also he is not fair in his hypothetical case, because he takes the comparatively low rate applicable to small engines and jumps them to their high rate for purposes of comparison. There are quite a number of rates in between those two points; and so far as those few engines are concerned on the Santa Fe I know of no reason why they could not have prevented the high pay for that particular class of

engine by bushing the cylinders the same as other parts of the Santa Fe road did, to prevent payment.

Another fact. Many of these large engines were in service in 1910, as well as the small ones, and the rates for all of them were fixed under the 1910 conditions. Since that time, however, the companies are building larger engines than were dreamed of at that time, and instead of having engines with cylinders of 24 inches and weighing 215,000 to 225,000 pounds on drivers, we now have engines with 28-inch cylinders, weighing 270,000 to 305,000 pounds on drivers, and the man who fires the engine weighing 270,000 pounds on drivers, with a tractive power perhaps of seventy or seventy-five thousand pounds, gets just the same pay as the man who fires the engine with a 24-inch cylinder and perhaps a tractive power of 50,000 or 55,000 pounds. And when you take into consideration that every six pounds draw bar pull means another ton of freight, you can realize the difference in the productive efficiency of the two men.

On Article 1, Mr. Sheean, commenting, on pages 27 and 28, on the Award in the Eastern territory, forgot to tell you why it was necessary later on, for the Board of Arbitration to place a further interpretation upon the Article as it was first awarded. In the Eastern Arbitration, the Railroads granted our request, word for word, as we had it, the minimum passenger rate for engineers, that is, so far as the rate applied was concerned. They did not grant the rate we asked for.

"The minimum passenger rate for engineers shall be \$4.25 for 100 miles or less; miles made in excess of 100, pro rata.

"Overtime in through passenger service is to be computed on the basis of 20 miles per hour."

We discovered that on a number of our Eastern roads the railroad officials commenced their usual tactics, in trying by sharp practice to prevent the men receiving the benefit of the award, and roads like the Lake Shore & Michigan Southern, roads like the New York Central & Hudson River, over which the 20th Century runs, claimed they had no through passenger service. They even claimed that the 20th Century, which goes from here to New York in sixteen hours, and on which you pay about six or seven dollars excess fare, was not a through train, because it made a stop at Cleveland to load the New York passengers; and after three months' fighting and trying to get the

Award applied, it was necessary to put the question up to the Board again to decide what is through passenger service within the meaning of the Award.

Gentlemen, it is these years of bitter experience like this that make us fight and contend for a hard and fast rule, the rule of the straight-edge that Mr. Sheean talks about, a rule with no elasticity; because these elastic rules stretch only one way, and always in favor of the company; and unless you do have a hard and fast straight-edge rule, nailed down at both ends and riveted at the corners, you will not get what is coming to the men, and that is the reason why we are such sticklers, and why we contend so strongly for a definition clearly defining these different classes of service and what the rules shall be, so plainly that there can be no chance for a misunderstanding.

Mr. Sheean also made the remarkable statement that there is no five-hour day in the East. That is perhaps due to the fact that he is not a schedule man. If a man runs 100 miles in the Eastern territory in through passenger service and makes it in five hours, he will not get any overtime. If he runs 100 miles in the Eastern territory and is six hours doing it, he will be paid 100 miles and one hour's overtime. So there is a five-hour day, and it is the minimum day in the East. One hundred miles or less—if he only ran ten miles in through passenger service—is a day. If you are over five hours in running 100 miles, you will be paid both the miles and the overtime; that is, over 100 miles, the miles made in excess of 100 are prorated.

And the same is true in this Western territory. It is the minimum day, 100 miles or five hours. Over 100 miles is prorated for that mileage, and the miles divided by twenty; and all these dire things Mr. Sheean prophesies are going to happen if the Award is granted, will not happen. The strongest proof that it is not correct is the fact that in the East, where it is granted and where it is in effect, none of these things have happened, and it is successfully in effect today on 97 per cent of the roads east of Chicago.

The Chairman: We will take a short recess at this point.
(At this point a recess of ten minutes was taken.)

Mr. Stone: I want to read to you that part of the Eastern Firemen's Award referring to passenger service:

"Overtime in passenger service, except suburban service,

will be paid at the rate of 30 cents per hour on the basis of twenty miles per hour, computed on the minute basis, five hours or less, 100 miles or less, to constitute a day." And that clause is in effect on 97.34 per cent of the mileage used in the compilation of Railroads' Exhibit No. 1.

On page 34 of his brief Mr. Sheean quoted quite extensively from the Award in the Eastern Arbitration of the Order of Railway Conductors and Trainmen, in which the Hon. Seth Low and the Hon. John H. Finley were the neutral arbitrators. He read as follows:

"The Board hopes that some other method can be devised for reducing overtime; for it does earnestly believe that the hours demanded in Slow Freight and Construction Service are unreasonably long. If no other remedy can be found, possibly punitive overtime should be tried; but this Board does not deem it wise to adopt this rule at this time."

Gentlemen, I want to say to you in all fairness that no other remedy has been found up to this time, and we believe that time and one-half will be a solution for overtime. I am sure that once we have time and one-half for overtime, continuous time between terminals, there will be no tying up under the law, and that there will not be any exhibits shown where a switch engineer works 4,755 hours in a year. They tell you that the exigencies of the business will not allow them, that it is impracticable to release the switch engineer at the end of ten hours, that they keep him on duty fourteen or fifteen hours, and then they bring in his report to show you what wonderful earnings he has made. But when time and one-half becomes effective they will release him at the end of ten hours, and he will not be allowed to go on time and one-half.

Regarding this question of weight on drivers, down in the bottom of their hearts I really believe that the Managers' Committee want weights on drivers. If they do not, the only reason they do not want it is because they know they cannot juggle weights on drivers as they can the size of cylinders.

Referring to the question of the Mallet engine, I think it was Mr. Park, a member of the Board, who stated that a Mallet engine was two engines. I think if the Board will take the rate on even the smallest engine shown here, take the rate asked for on 80,000 pounds on drivers, we ask \$4.50 in passenger service

and \$5.00 in freight, and if you multiplied that by two, you would have \$9.00 for the rate for passenger and \$10.00 for freight, and we are only asking for \$7.50 rate on the Mallet.

So the question of the Mallet rate has nothing wrong with it. You might just as well say that if by some means you could provide for one of our engineers running two of these small engines coupled together, he should not ask any higher rate. That is what it means, running a Mallet engine. It is really two engines.

You have heard much from different witnesses on the stand in regard to how these high rates were obtained. To hear them explain it, they were always granted under pressure—always under pressure. Gentlemen, you never will have the experience, but I wish it was possible for you men to do business with some of these mild mannered gentlemen on their native heath, when they sit in an office and are both judge and jury, and you are trying to get some higher rates. You would see about how much pressure there was with it.

On page 38 of Mr. Sheean's brief, great stress was laid on what Mr. Stone said in his argument in the East. Mr. Stone said as follows:

"Gentlemen, there is no good reason why a man should go out of the yards in Chicago with the same class of engine and start west for \$5.40, with 1,800 tons, and take the same engine in the Lake Shore yards, and start east with 3,500 tons for \$4.85."

Yes, I said that. I still think that same way, and I hope to live long enough to see the time when there will not be the differential with the man in the East, but I do not expect to arrive at that result by scaling down the wages of the man in the West. I expect to bring up the low spot in the East. I said all of that, but what did the railroads say in reply? Let me read that to you, from page 492 of the Arbitration between the Brotherhood of Locomotive Engineers and the Eastern Railways, in 1912.

Mr. Judson was a prominent attorney from St. Louis, and one of the members of the Board.

"Mr. Judson: Before you leave that, Mr. Worthington, is there any reason that you now know of, why the wages should be lower in these groups 1, 2 and 3, than in other parts of the country?"

Mr. Worthington: (Speaking for the railroads.)

"It has always been customary, because of the difference in many factors of railroad operation, to pay higher wages in the Western group and in the Southern group. While the density of traffic is not as great in the Western and Southern groups; the earnings per unit of traffic as measured by the ton mile, are considerably greater. I was, myself, connected with Western roads all my life, up to seven years ago, and, in the position of Assistant General Manager of the Southern Pacific Company, I had to handle the labor questions, and every organization that appeared before me laid particular stress upon the fact that they were entitled to higher compensation than the roads in the East, because of the difference in living conditions and the difference in the character of the service, and other reasons, and as shown by the statistics of the Interstate Commerce Commission, the rates of pay, like the rates for freight, have always been higher, and I see no reason why that should be changed. The other factors are not changing, and I do not see why the factors of labor should be changed.

"Mr. Morrissey: You refer to the extreme West, do you not?

"Mr. Worthington: Well, the roads out of Chicago. The most of the roads out of Chicago run West—take the Union Pacific, for instance, that earns from 8 to 9 mills to 1 cent per ton mile, for the freight, and then there is the Burlington and the Great Northern, and the other lines, some a little less than that, perhaps, between 7 and 8 mills; but, take these roads here in the East, we earn along below 5 mills, and from that up to 6 mills, and 6½ mills per ton mile. Another thing, we have a comparatively short haul on our freight traffic, while the Western Roads have a pretty long haul, and their earnings per ton of freight are very considerably greater than ours. It is a combination of circumstances, it is not alone the ton miles, but it is a combination of conditions in railroad practice that has made this differential. It has always existed, and I cannot see why it should be changed."

Again, on page 494:

"Mr. Worthington: Well, it makes a very long area when you go from New York to Denver, gentlemen, and it seems to me that it is altogether too great a distance for any standardization.

"Mr. Morrissey: That is what I thought, at the time, but they convinced me I was wrong.

"Mr. Willard: Mr. Chairman, I can foresee that, at some time during our conference, I shall want to say something on this subject, and perhaps it would be better that I should say it now, while Mr. Stone is here.

"It has been my good, or bad fortune to have conferences at times in the West with Mr. Morrissey and others, with reference to the making of schedules that obtain between Chicago and Denver, and invariably the argument has been urged that, because of the fact that the West was a new country and it costs more to live, and the country was less attractive to live in, that the roads west of Chicago should pay more than they should pay east of Chicago, and, invariably, they have done so. I assume that that has come about because of the force with which the representatives of labor have urged the case, accompanied also by the fact that on account of the high rate per ton mile that obtains in the West, the railroads were able to meet those conditions.

"As a matter of information only, if the Baltimore & Ohio, for instance, were receiving the same ton mile rate as the Burlington, it would increase our net earnings \$24,000,000 per year, and that, of course, becomes a very important factor in a controversy of this kind."

At that time, Mr. Willard, who said this, was president of the Baltimore & Ohio.

On page 496:

"Mr. Willard: The wages west of Chicago are and have been constantly higher than they are east of Chicago, and it has been claimed by the representatives of labor that there was good reason for that difference, and their claims have been conceded to a very appreciable extent.

"Now, if there is a real reason why wages west of Chicago should be higher than they are east of Chicago, it must follow that there is just as good a reason why they should be less east of Chicago than they are west of Chicago."

And on page 561:

"Mr. Worthington: * * * You will notice that there is a very marked difference between the Eastern and Western Classifications, a very marked difference. * * * The rail-

roads between Chicago and Denver earn 7½, 8 and 9 mills per ton per mile. If you will look at the annual reports, you will find that is so; while on this side we earn 5 and 6 mills per ton per mile.

“Mr. Morrissey: Why is that?”

“Mr. Worthington: Because of the difference in the character of the tonnage and the difference in rate structures.”

On page 562:

“Mr. Worthington: In the West, of course, where they have a very much longer average haul, they earn more money per ton of freight. For example, let us take the Union Pacific, with an average haul of something like 300 miles compared with the Wheeling & Lake Erie with a haul of 110 miles. As will be apparent, the Wheeling & Lake Erie has a terminal expense at both ends of the 110 miles. The Union Pacific can haul that freight for 300 miles and have a terminal expense at the two ends. The terminal expense, gentlemen, represents quite a proportion of your expense in handling traffic. Terminal expense is quite an item.”

Now, I want to read to you from page 1449 of the stenographic report of the Committee Conferences in the Firemen's Eastern Wage Movement, 1912-1913.

“Chairman Elisha Lee: I would also call your attention to the fact, and it may have some bearing on the poverty question, that the rates per ton per mile are greater in the West than they are in the East.”

Again, on page 1457.

“Chairman Lee: I will say this to you, Mr. Carter, and I will say it without consulting this committee on this side of the table, and I believe I am voicing the sentiments of every man on this side of the table, that we propose to give your men everything we can.

“Mr. Carter: Are you prepared to give them, not the highest wages in the West, but the average wages paid in the West?”

“Chairman Lee: We would be, if we considered they were entitled to them. We do not consider that they are entitled to the average wages in the West, because the average wage in the West has always been higher than the average wage in the East, on all classes of employment.”

Now, I read from volume 3 of the Firemen's Eastern Arbitration, page 2458. This is from the closing argument of Mr. Lee, summing up for the railroads:

"The firemen are apparently asking for what might be termed the average rates in the West. There has been no evidence produced, so far as we have been able to notice, showing that the men in the East are entitled to the average rates in the West, no matter on what basis those average rates may be produced."

And on page 2464, Mr. Lee again:

"Comparing the Eastern rates again, with the Western rates, we call your attention to Exhibit No. 1 of the railroads, sub-Exhibit No. 30½, where is given the cost per locomotive mile of firemen's wages in the East as compared with the West. In 1910, the cost of wages of firemen per locomotive mile was 10 per cent higher in the West than in the East. In 1912—

"The Chairman: What is the first year you mentioned?

"Mr. Lee: 1910. We have it back to 1908, but I was merely comparing from 1910. I will give you the figures for 1908, 1909, 1910, 1911 and 1912. In 1908 the West was 10.2 per cent higher; 1909, 5.3 per cent higher; 1910, 10 per cent higher; 1911, 4.5 per cent higher, and 1912, only 2.7 higher. The cost of wages per locomotive mile includes all compensation to firemen. It includes the cost to the railroads of producing one locomotive mile as far as wages to firemen are concerned. That is what the railroads get from the firemen—a locomotive mile. That shows the spread between the East and the West.

This is the famous "Black Book" of the Conference Committee of Managers in the Eastern territory. Referring to Exhibit No. 20, showing the average receipts per ton-mile, Eastern, Southern and Western districts, during the fiscal years 1900 to 1911. 1911 the Eastern district receipts per ton mile in cents were .646. In the Western territory the receipts per ton mile, .960. A percentage of 48.6 in favor of the Western territory.

The average receipts per passenger mile, Eastern, Southern and Western districts: In 1911, Eastern district receipts per passenger mile, 1.779. Western territory, 2.139. A percentage increase Western territory over the Eastern territory of 20.2 per cent.

Ratio of operating expenses to total operating revenues,

Eastern, Southern and Western districts: 1911, Eastern territory, 71.2. Western territory, 67.4.

Exhibit 29: "A comparison of wages paid various classes of skilled workmen." The statistics are those of selected occupations in the building trades alone, and are taken from a selected list of large cities, representing a full week's earnings at the prevailing union scale of wages; make no allowance for overtime or for periods of unemployment. With these qualifications in mind, it may be stated that so far as these trades are representative of the industrial world outside the railway industry, the earnings of skilled and well organized workmen in the West range from 16 to 25 per cent higher than in the East, that is from a sixth to a fourth higher.

Reading from volume 3 of the Eastern Arbitration, page 1813. This is Mr. Walker, who is the Secretary of the Eastern Association of Railways, who is talking.

"It will be seen that in the Chicago zone the rate is 40 cents, or rather from 39 cents to 41 cents. In the St. Louis Zone, 39 cents is the prevailing rate. In the Kansas City Zone, the rate changes from 38 cents to 40 cents, and in the Denver Zone, 40 and 41 cents. Generally, it appears from this, that there is a spread, I think, on the average, of about 5 cents between the East and the West. The same condition prevails with the boiler makers. I think that these figures show that the range is five or six cents between the East and the West, and it will be noted further that as you approach the Atlantic Ocean, the rates taper down, and as you go West they go up."

Page 14, volume 4, Eastern Arbitration of Firemen.

This is the brief of Mr. Elisha Lee, Chairman of the Conference Committee, from which I am reading now, which was presented before the Eastern Arbitration Board.

"We deny that the railroads in the Eastern district should pay the same rates as those in effect in the Western district."

And again reading from his brief on page 4:

"We would respectfully call your attention," talking to the Board—

"to Exhibit 1, Sub-exhibit 29, which shows that employers other than railroads in the West pay rates of wages from 16 to 25 per cent higher than for the same occupations in the East.

"This comparison of the general level of rates in the East

and West shows clearly that the rates of Western firemen should properly be higher than those of Eastern firemen.

“Furthermore, your attention is called to the fact that the several rate schedules do not, in themselves, show either the total possible earnings of the firemen or the total cost to the railroads, for the reason that numerous allowances beyond that shown in the rate schedules give the firemen increased earnings and add to the cost to the railroads. It is admitted that so far as the rates appearing in the schedules are concerned, those in effect in the Western district are higher and always have been higher than those in effect in the Eastern district. However, notwithstanding this fact, the conditions of service in the Eastern district, where the terminals are closer, and more favorable conditions surround the service, give the firemen a comparatively higher earning capacity.”

So it is not only what Stone says that comes back to meet them, but it is what some other people say as well that gets into print occasionally.

On page 62 of the brief:

“Mr. Carter, in presenting the demands of the firemen for increased pay, placed particular stress on the fact that he was only asking for the average rates in effect in the Western District, in connection with which we have hereinbefore shown that so far as the wages which finally reached the pockets of the firemen are concerned, the wages paid on a common basis in the Western District are now only 2.7 per cent above those in the Eastern District.”

I will now refer to the Arbitration between the Eastern Railroads and the Order of Railway Conductors and Brotherhood of Railroad Trainmen, volume 2, page 1035. This was the Arbitration in the Eastern Territory.

This is the testimony of Mr. Ray, Trainmaster of the Pennsylvania Railroad:

“I have no knowledge of what the conditions are west of the Mississippi, at the present time, but compared with the work that I done 35 years ago, why, the New York Central is a heaven to the Santa Fe being the other.”

And on page 1098, in the testimony of Mr. Coney's, Superintendent of the Vandalia Railway:

“Mr. Elisha Lee: Do you think the work differs materially at Chicago from what it does at Indianapolis?”

“Mr. Coneys: Yes, sir.

“Mr. Elisha Lee: In what way?”

“Mr. Coneys: Well, to my mind, Chicago is in a class by itself. The work there is more complicated; they have a great interchange there between the Eastern and Western Railroads, and a large percent of crews are employed in that class of service. These men are required to know the rules and regulations of the foreign railroads over which their movements are made.” (Transfer service.) “Some of the movements are for a distance of 15 or 16 miles; others shorter. I believe there are a few that are longer. These men are responsible for the movement of their trains on those foreign roads. The situation generally is more complicated than any place that I have ever been located.”

Conductors and Trainmen's Arbitration, Volume 3, Page 2047:

“Mr. Elisha Lee: If the mere existence of that rate in the West can be considered in justification, with just as much force we hold that the mere existence of the differences between the East and the West is a justification for maintaining that differential.

“Further, I would like to call your attention to the Exhibit No. 43 that was put in this morning, showing the comparison of weekly earnings, union rates of pay, based on hours fixed per week in the East and in the West. It very clearly shows, gentlemen, the average of the Western territory over the Eastern territory runs all the way from 12 to 22 per cent.

“We maintain, not alone from the fact that the necessity for paying the Western rate in the East has not been proved by the other side, but we maintain that the Western rate is not applicable to the Eastern territory.”

Reading on page 9 of the same volume, but from the Railroads' brief, which is bound in with the Proceedings:

“Even if it had been shown that the high rates in the West were justified it would not afford any argument for an increase in Eastern rates, for there is an established differential in favor of the West in other occupations, as appears from Exhibit 43, which shows that in industrial occupations the earnings on the

basis of the number of hours worked per week are from 12 to 21 per cent higher in the West than in the East."

Page 25 of the Railroads' brief:

"The population in the Eastern district is more dense than in the Western district, and, therefore, the average distance between industrial centers is less in the former. This condition results in the establishment of a large portion of the service for runs of less than 100 miles, for which 100 miles' pay is exacted, and by reason of the generally shorter runs in the Eastern district, the employes receive a substantial benefit in constructive mileage allowances, giving them greater earnings for the actual miles produced. The Conductors and Trainmen claim that the rates in the West are approximately 15 per cent higher than in the East, and so far as basic rates are concerned their claims are about correct, but basic rates do not tell the whole story, as the following table will show:

Then follows the statement from Exhibit 15.

"The statement shows that notwithstanding the higher basic rates in the West, the Eastern Railroads in 1911 actually paid out 5.93 cents in conductors' wages for every train mile run, as against 5.10 cents in the West, or 16 per cent more, while for other trainmen in the same year they paid 11.18 cents per train mile in the East, as against 9.92 cents in the West, or a differential of 12.7 per cent in favor of the Eastern employes."

On page 3 of the Railroads' Final Brief:

"It is one of the railroads' principal contentions against the adoption of western rates in the East that uniformity of conditions East and West has not been proven, and that as a matter of fact it does not exist."

Page 15 of the Award:

"The prevailing opinion of the Board is that standardization as to pay and rules, as between the Eastern Territory and the Western Territory, is at the present time impossible."

Regarding Article II of our proposal, on page 38 of the Railroads' Brief, for the unclassified service of pusher, helper, mine runs, work, wreck, belt line, transfer, etc., I desire to call your attention briefly to the fact that 100 per cent of the mileage in the Eastern Territory pays through freight rates to firemen in pusher and helper service. See Employes' Exhibit 87, page 11.

Ninety-one per cent of the mileage of the Eastern Territory pays through freight rates to firemen in transfer service.

These men who in this pusher and helper service now earn \$200 or more per month, they are now paid through freight rates. Much of the helper and pusher service is at outlying points where there is no social life. No doubt you will recall the testimony of Engineer Finn, who lived at the little town of Tye, who stated that as soon as they can they go back to civilization. A man who lives 28 miles from a church and 30 miles from a doctor is certainly entitled to be paid a through freight rate. And Engineer Finn testified that in this month that they speak of, when he earned \$200, he was running a steam engine on way freight.

In hearing Mr. Sheean's description of the mine run on the Rock Island in Oklahoma, you would think that that crew went out to one mine and got a car, and then came back to the terminal for the sole purpose of being automatically released, and starting a new day. And then they go out to the next mine and repeat the same performance, keeping it up for seven or eight trips as Mr. Sheean described, in order to attain this remarkable result. The truth of the matter is that the crew takes all the empties that the engine will drag, goes out and takes all that the mine has, and if they get more than they can handle in one trip in, they make another trip. And if the mines are working full capacity they make not to exceed two trips per day. And on the run to Centerville, Iowa, as described by Mr. Sheean, and the one in Oklahoma, on the Rock Island, both of these runs now pay the through freight rates, at the present time.

Now, Mr. Sheean again makes the further claim that standardization cannot be applied to transfer service. He further claims there is no analogy between these different classes here mentioned under this Article II where we describe all these different classes together, and freight service. He again allows his imagination to cause him to see pictures of what dire things are going to happen if the Board should grant this request of ours. And I want to repeat again that the best answer that can be made is the fact that in the East where it was granted none of his fears ever materialized.

If we would follow Mr. Sheean's theory to the extreme according to his theory different speeds of freight trains would

take different rates. And outside of his bare statement that the rates now paid are fair, full and equitable, the railroads have produced no evidence to show that this is true.

Regarding the question of electric service, Article II. Electricity has passed the experimental stage, and I would refer you to Employes' Exhibit 54, page 20. We have heard that story about electricity being in the experimental stage, for the past eight years, and the railroads want to keep it in the experimental stage until they can get cheap rates established all over the country, if possible. It is true there is a flat rate for electric service on the Southern Pacific in Oakland, but the Southern Pacific is not on a ten hour day, as stated by Mr. Sheean, but the men there are paid a flat rate of \$5, and the runs are in a pool, and the average daily runs are about 8 hours and 30 minutes, after which overtime is paid. This is the average time of all the runs in the pool. And my understanding is that the average daily mileage run is less than 100 miles for all the trains.

However, be that as it may, this one fact remains true, that the rates paid, and the rules in electric service on the Southern Pacific Railroad at Oakland at the present time are exactly the same as were in effect for the steam service prior to the adoption of electricity.

Mr. Sheean also stated that the men in these different electric services accepted the rates offered gladly. Why, of course they accepted them. What else could they do? Their job was gone in steam, and the electric service had superseded it. The only thing they could do was to take the service, and to get the rate that was paid at that time, in the hope of getting the rate up to a proper remuneration later.

Regarding the arbitration of the street car service on the Southern Pacific in Oakland, that we spoke of, I haven't the papers with me, but if my recollection serves me right we won the case, at least the award that was handed down was satisfactory to the men.

Mr. Sheean quoted the Arbitration Award in the East, and also quoted the mileage on the Pennsylvania and Long Island Railroads and showed that it was much higher than that of steam. He forgot to say anything about the New York Central, the New York, New Haven & Hartford, which handle and operate the greatest electric service in the East, and pay the minimum pas-

senger rates, with the same rates and rules as for steam service, also with seniority interchangeable.

I also want to read to you from the Award in the Eastern Arbitration between the Eastern Railroads and the Conductors and Trainmen, at page 37:

“The pay of passenger conductors on steam trains, or upon trains on which an electric locomotive is used, to be 2.9 cents per mile.”

Clearly showing that the rate for electric and steam service was exactly the same.

Mr. Burgess: Mr. Stone, what is the conductor's rate for steam?

Mr. Stone: The same, I understand.

Mr. Burgess: Two and nine-tenths?

Mr. Stone: Two and nine-tenths, is my understanding. Yes, that is the award, the same exactly.

The Chicago, Milwaukee & Puget Sound lines have contracted for an equipment—has part of it on the ground now—contracted for the electrifying of over 400 miles of the main line. A road as conservative as the St. Paul is known to be in many ways, certainly would not try some new experiment for the handling of its heavy through overland traffic for over 400 miles of mountain territory. So we claim, gentlemen, that it has gone beyond the experimental stage.

The Butte, Anaconda & Pacific Railroad has electrified its entire road. It is handling more tonnage with less crews with electric locomotives than it formerly did with steam.

So the time has arrived when there should be rates and rules established.

We claim the engineer and fireman should handle the motive power, regardless of what that motive power may be, whether it is gasoline, multiple unit, steam, electric locomotive or any other power that may be discovered. We believe that we have the inherent right to handle the motive power of this country. It has been ours for years and years unquestionably, and we certainly are not going to resign that right without a struggle.

In addition to that, the hazard of railroading at the best is always bad enough, as shown by the very high rate of our men killed and crippled, according to statistics, and the wreckage

we have to take care of. And why should they be required or expected to assume the extra hazard of having inexperienced men (because they are cheap) operating electrical equipment sandwiched in between steam trains on the same track?

During the period of transition from steam to electricity, you have been shown how it is interchangeable; how men work part of the time with one and again with the other power. If, for any reason, the electric equipment or motor car fails they at once take a steam engine on the run.

The changing of motive power from steam to electricity or gasoline brought no fundamental change in the duties or responsibilities of the engineer, consequently there should be no difference in the rate of pay.

In other words, to be a qualified engineer, the man must come up to the standard required by the company and pass the prescribed examinations. This holds true of the men in electric service and on motor cars.

In fact, I might add that on a number of the roads they even examine closer for men in the electric service, and if a man has the slightest affection of the heart in any way he is rejected from the service, because they claim that a man with weak heart could not stand an accidental shock of the heavy electric current. And that is an increased hazard, and has increased the danger of the loss of position. So that the hazard has increased instead of diminished by the change of power.

The companies recognize the right of the conductors to man the motor cars as conductors, and they pay practically the standard rate paid passenger conductors, the minimum standard rate at least.

In our Exhibit, the "Path of the Pantagraph," if there is any question in your minds, gentlemen, as to the risk that men assume in handling these high voltage currents, it can be very quickly satisfied and set at rest by reading just a few pages of that exhibit, and seeing what it means. Not only do you have the hazards of the former occupations, so far as accident to trains is concerned, and signals that you have to account for, but you have this heavy voltage overhead, high voltage currents, and that is an increased danger. We some time ago had an engineer on the New Haven killed who was on a steam engine at the time, out on the footboard working on a sand pipe that had

been stopped up, and by actual measurement he could not have come closer than 15 inches to the overhead wire, yet it jumped across to him, and he was dead in an instant. And now the company has issued a notice that you must not get closer than 20 inches to the wire carrying 14,000 volts for fear that it may arc across.

The field for the use of electric motive power in freight service is being rapidly developed, and there is no reason, from our point of view, why they should not pay the same rate for tractive effort, as is paid for steam.

The Chairman: We will now take a recess.

(Whereupon at 12:30 o'clock P. M. a recess was taken until 2:30 P. M.)

AFTER RECESS.

Mr. Stone: I desire to call the attention of the Board to Article No. 3, the local or way freight service, page 46 of the brief. I fully agree with the statements made by Mr. Trenholm that every employe knows what a local train is, or what local service is. I don't think there is any question but what all the employes in a service know what local trains are and what local service is. They do experience difficulty, however, in getting a differential rate in all cases, because it is a hard matter to get the officials to agree that they are locals. And, gentlemen, I submit that it is absolutely necessary that our definition, as proposed in the first paragraph of Article 3, be granted, if we are to receive any benefits from an increase or a higher rate for local train service.

The different definitions that you find throughout the country are perhaps the best that the Committee of a particular railroad could get.

It is true that this Article was withdrawn in 1910, as stated by Mr. Sheean. But it was withdrawn for several reasons, in addition to the one that we thought perhaps we could settle with the officials on the different roads. It was withdrawn in order to reach a compromise settlement, and to prevent a strike, with all the attendant ills that go with it, with the result that the men did go back to their various companies, and after five years of trying to settle the question it is back here again, and it is before this Board for a settlement. Dr. Neill's criticism

of the Eastern Award was because the Board of Arbitration did not define what a local train was. The definition that we ask for is in effect today on the Northern Pacific Road, and practically the same rule is in effect on the Union Pacific, and those roads are still able to do business. It has not affected them in any way.

The truth of the matter is the railroad officials will protest against any clean-cut definition of local train. Because just so long as they do that, and it is left to the option of the local officers to define what a local train is, they will succeed in getting a much larger share of their local work done for through freight rates. That is why they fight the definition so hard. If they are honest in their claim that everybody knows what a local train is, a definition defining what a local train is, clear-cut, as we are asking for, is certainly not going to make matters any worse. And this talk about this chaos that we are going to see if every one of these articles is granted, is wrong. It has not caused chaos on the Northern Pacific Railroad where they have it. There is no chaos on the Union Pacific Railroad where they have a rule defining clearly what is local service. And I know of no reason why there should be any trouble in applying the rule asked for to any road that honestly wants to pay the differential, if one is granted by this Board.

Regarding the question of the mixed train service. Mr. Willard, president of the Baltimore & Ohio Railroad at the time, and at the present time, represented the railroads in the Eastern territory in our Arbitration, and he took the position that there was no such thing as mixed train service. That it was either a freight or a passenger train. And the settlement in the Eastern territory was made on that basis.

The statement made by counsel for the railroads that some particular manager offered to turn over to a crew on a certain branch all the revenue derived from it, is simply for effect. That statement is simply for effect. The manager could not deliver the goods if the crew would accept it. No manager would be allowed to turn over the revenue of any part of his railroad. In fact, that is something that is clearly out of his hands, and it is a good deal like the talk about some of these branch lines, when we go in on a branch line on these different roads, and they say, "Why, we will make you a present of that branch if you will take

it and operate it." That is all talk. They wouldn't give you the branch if you would accept it, and they could not deliver the goods.

Regarding this question of the latter part of the proposal in Article 3, for additional pay for through and irregular freight trains doing certain stipulated work, we believe it is absolutely fair, so far as the engineers and firemen are paid on a piece-work basis, that anything that prevents them making miles should be paid for in addition to the reeling off of miles.

Regarding the question of switching service. No class of service, in my opinion, has been more neglected, nor has the burden of any class of the railroad service increased more rapidly than that of the switching service. Years ago it used to be looked upon as a soft job. That day, if it ever existed, has gone long ago. If there are any soft jobs today in this service, we do not know their location.

Today, the men in switching service must go through the same examinations and must have the same requirements as the road men, and also the same qualifications. It is hard, heavy work, and there is never any constructive mileage or other allowances in their case. They simply work all the time. If they are paid for ten hours' work they give ten hours of service.

Many of our railroads do not buy or build engines for switching service, as stated before, but they take the heavy road engines that are actually ready for the shop, and in an endeavor to get the additional mileage out of them, they assign them to service in the yard, and switching. They were not designed for switching service. The space between the side of the cab and the reverse lever is so narrow that a man of ordinary size cannot stand beside them, and the result is he has to walk the length of the cab every time the lever is moved. The tanks are so high it is impossible to see over them, with the result that the men must hang half way out of the side windows of the cab, in all kinds of weather, whether coupling onto cars, or to see signals from the rear, thereby greatly increasing the hazard due to the close clearance of tracks in terminal yards.

The adoption of "hump" yards in many of the larger terminals calls for very heavy engines, either Consolidation or Mallet type, and wherever a Mallet type engine is used, we believe they should carry the road rate. And we believe that our request for

these engines in switch service, these road engines that are put into switching service, for the differential to be applied, is very conservative.

The policy is already well established in the South, and wherever a road engine is used in the South, no switching service or differential is allowed.

Regarding the differential of two cents for a night's switching, or the man in night service. The danger at night is not all confined to the man on the ground. The man hanging out of the cab windows of the modern locomotive, where the clearance is close, is in just as much danger.

Again, the statement on page 55 is not correct. "His seniority rights quite frequently give him his first engine experience in night switching, after which he passes to road work."

That used to be the case, perhaps, but that has gone long ago, together with the soft jobs, if they ever existed. Men live and die and work in the yards, or they are left right in these large terminals, and they never work anywhere else, and they have no road jobs of any kind, and all the promotion they can look forward to is promotion to a switch engine.

One thing that particularly impressed me was the strong plea made by counsel for the railroads of how absolutely important it was that the switch engineer be given one full hour for his hot noonday meal. Safe to say that 75 per cent of them never see a hot meal in the middle of the day, and instead of switching right alongside of their home, they are away off in some outlying terminal, perhaps two or three miles away from any kind of a boarding house, perhaps in bad weather, zero weather, something of that kind, and the only place they can go or do is simply to sit on the engine. They never know one day ahead whether they are going to be released or not, and they are compelled to carry their lunch, and the result is that the switch engineer, in over 75 per cent of the cases, year in and year out, eats his lunch out of a dinner pail, both day and night.

I was also impressed with the fact that while it was so absolutely necessary that the switch engineer have this one hour's full time, and must have his meal at the end of six hours, it was not necessary at all for a hostler to have any meal any place. He could just as well work twelve hours.

The eight-hour day on the New Haven was spoken of. The

ability of the New Haven, with its large tonnage, still to arrange their switching service into three eight-hour switching crews, shows what a road can really do when they want to. And I will guarantee you, gentlemen, that if the time and one-half for switching service is allowed, that some way will be found of taking up the slack so there will be no overtime. They will find it practicable, with modern operations, with overtime, to release the man at the end of his ten hours' labor.

Regarding the question of preparatory time. Counsel has dwelt at length several times in his final summing up, and also in his brief, about the testimony of Engineer Young of the Union Pacific, who understood that his preparatory time was thrown in, was a part of his day's work. He did not say a word about the testimony of all the other witnesses. He did not agree with that at all.

I have read to you the findings of our courts that a man is on duty when he commences to supervise and prepare his engine for the trip. It is the only class of service that I know of where they expect a man to come around an hour or two before leaving time and throw in an hour or two of work for good measure, in order to get ready to go out and do a good day's work. I believe that the engineer should get his engine ready and supervise the preparation for the trip, and I believe that he should be paid for that separate and distinct, as an arbitrary allowance.

I will say to you frankly, I don't want to go out of here tonight—and I am going to Cleveland—I don't want to go out at 11:30 on the Limited behind an engineer who did not supervise the getting ready for that trip. I don't want anybody else to get it ready, because others are entrusting their lives to him, and I am entrusting my life to the fact that he did supervise and get that engine ready, and I want him to be paid for it.

I believe Mr. Sheean told you that on this terminal delay proposition the companies agreed to a proposal whereby they would have had to pay out over \$450,000. I am at a lost to understand how they could figure out any such amount in anything they have offered us, when many roads already have initial terminal delay, and by their exhibit 80 per cent of all trains run get over the road without overtime. So there certainly must be something wrong with that estimate somewhere.

Automatic release and tie-up.

Great stress was laid by the counsel for the railroads upon the fact that nearly all of these schedules had provisions whereby they could have a number of short strips, and everything else, so as to prevent the penalizing of the companies. He lost sight of the fact that the companies, on the 15th day of October, 1913, tried to abrogate every one of these articles, and in fact, served notice on us that they were abrogated, and were not in existence; and these rules that he speaks of now were a part of the schedules that we had restored before we agreed to the present arbitration.

You have heard a great deal about these five and ten mile runs, where a man claims a 100-mile day and gets it, and pulls out another train and gets another 100-mile day. That is not where the thing hurts our men so much. I will tell you where it hurts. It hurts after the man has been on duty ten, twelve or fourteen hours, and he comes in so tired that he hates himself, and they want him to go out and make another short trip rather than call a fresh crew.

I refer you to page 4794 of the proceedings, No. 47, in the testimony of Mr. Higgins.

“Mr. Stone: Do you consider it fair to ask a crew that has been fourteen hours on the road, with a tonnage train, on the arrival at a terminal, to make another trip, and go out and pull in some train ten or fifteen miles out, that will probably require two hours more, instead of calling a fresh crew?”

“Mr. Higgins: Fourteen hours on the road?”

“Mr. Stone: Yes.

“Mr. Higgins: I do not see anything unreasonable about that. In fact, it may be absolutely necessary, at times, to do. The engine is there and ready, and it may be the only engine that is ready, and you must clear the main track.

“Mr. Stone: I am talking about a terminal, where there are plenty of other crews. The train is not on the main track. They are tied up out there somewhere, and want somebody to go out and tow them in.

“Mr. Higgins: I would say, if you had a fair rule, which permitted the coupling up of that short trip with the longer trip, that you might call the first crew out, and have them pull that train in, and then continue on, on continuous mileage. That would enable you to relieve this crew, but if they required a full

day, a hundred miles for going out that five miles to pull this crew in, I would say that that was an unreasonable exaction, and that the official would be justified in requiring the crew which could do it, under the law, to go out and pull that train in for the continuous mileage.

"Mr. Stone: Is it not just such things as that, that you think it is fair to call this crew to go out, after fourteen hours on duty, to pull that train in—is not that just what caused the release rule?

"Mr. Higgins: Do you think that is an unreasonable requirement?

"Mr. Stone: Absolutely, yes.

"Mr. Higgins: Why?

"Mr. Stone: If I had been fourteen hours on duty, I have done enough, and I ought to have my rest.

"Mr. Higgins: You would remain sixteen hours on duty to get in, would you not?

"Mr. Stone: Under the law, yes; and before that I remained forty hours on duty.

"Mr. Higgins: Now, do you think it is right, with a rule that permits you to remain, and permits me to have you remain on duty sixteen hours, guaranteeing you ten miles for every hour you work—do you think it is unfair for me to require you to do that, when, if I fail, I would call another crew and pay them 100 miles for 10 miles?

"Mr. Stone: I say absolutely yes, it is unfair.

"Mr. Higgins: Would you not, then, with that view, agree to so modify the rule that required me to pay 100 miles for 10 miles, as to make it equitable and fair, so that I could do it, and be fair both to the company and to the men?

"Mr. Stone: No, I would make the rule, if I had my way, so you could not work any man even fourteen hours, because you could not work a government mule that long but what the humane society would be after you.

"Mr. Higgins: You have less heart than you used to have.

"Mr. Stone: Perhaps that is true; maybe I have. Perhaps I feel more keenly what these men are going through, than I used to, and if I hear a few more statements from engineers and firemen, like I have, why, perhaps I will be more radical than I am now."

Gentlemen, that is what lies behind the automatic release. They do not want any kind of automatic release rule. They want to bring you into a terminal, regardless of whether you have been ten hours on duty, or whether you have given them a full day's work or not, and they want to send you out again to make another trip, if by so doing they can avoid calling a new crew, and so save a few miles; and we believe it is absolutely fair that men should be released when they arrive at the terminal.

The Chairman: Mr. Stone, it is insisted by counsel for the roads that it is the purpose of the men, in asking for this rule, to enable them to earn these abnormal wages referred to in the instances to which Mr. Sheean has called attention.

Mr. Stone: I know they claim that, for the sake of argument, Mr. Chairman.

The Chairman: Is it the desire of the men that a rule should be framed by which the men would be able to earn the large amount of wages referred to here by Mr. Sheean.

Mr. Stone: I would say to you frankly that I do not believe any rule could be so applied that any man could earn such wages as they have talked about here; and if the rule should be granted which we ask for, they would change the operation of their trains tomorrow, so that men could not earn that amount of money.

The Chairman: How could they do it on these short runs?

Mr. Stone: They would perhaps couple it onto a longer run, or create a new terminal for it, or something of that kind, as they often do.

The Chairman: So that I understand your purpose in asking for this rule is to secure fair pay for what you term a fair day's work.

Mr. Stone: Yes, and when men have given the hours or miles for a minimum day's work, we want those men released, so that they can have their rest, and some other crew that have been waiting there for hours or days can go out.

Of course, if you grant us pay for held away from home terminal, there will not be so much fuss about the automatic release. They will get the other crew out rather than pay them.

Counsel for the railroads compared the total number of trains tied up in 1914 with 1913, as shown in Statistical Anal-

ysis of Instances of Excess Service of Railroads, as furnished by the Interstate Commerce Commission, and endeavored to show by round numbers that the number of tie-ups on the road under the law had been reduced about one-half, 1914 over 1913. Employes' Exhibit 88 contains a statement furnished by General Superintendent Parks, which shows the number of trains tied up on the Union Pacific Railroad during the month of November, 1906, and in terms of percentage is equal to .4 of one per cent of all trains run during the month of November, 1906. By comparing the number of trains exceeding sixteen hours and the number of trains tied up to avoid exceeding sixteen hours on the Union Pacific, as shown in Railroads' Exhibit No. 12, it will be noted that .44 of one per cent of all trains run either exceeded the sixteen hours or were tied up to avoid exceeding sixteen hours. This would indicate that conditions in 1914 were worse than in 1906. Railroads' Exhibit No. 12 shows that 1.19 per cent of all trains run during the year ending December 31, 1913, either exceeded the sixteen hours or were tied up to avoid exceeding sixteen hours; and taking the Union Pacific in 1906, with .4 of one per cent as representative of all Western Railroads, it would show that the percentage of trains exceeding sixteen hours or tied up to avoid sixteen hours, is almost three times greater in 1914 than in 1906.

Counsel for the railroads, in showing in round numbers that the number of tie-ups has been reduced one-half, 1914 over 1913, does not take into account the difference in the number of trains run, and by so doing furnishes a striking example of the difference in the estimated cost to the railroads of the propositions submitted by the employes if same had been based on month of October, 1914.

Mr. Sheean also incorporated in his brief, on pages 68 and 69, the settlement that was reached between the four Railroad Brotherhoods in 1908 and a Conference Committee of Western Managers regarding the Hours of Service Law. I simply wish to say that the settlement at that time was not satisfactory, and I was one of those present. Neither did the Conference Committee of Managers carry out in good faith what they agreed to when they made the settlement.

Article 6 reads:

"Road crews tied up for rest under the law and then towed

or deadheaded into the terminal, with or without engine or caboose, will be paid for under Article 5, the same as if they had run train to such terminal."

Article 6 has never been carried out in good faith by a number of these Western Railroads.

It was clearly understood that when a man was released, he was released for the full legal rest period, either eight or ten hours, as the case might be, and that when he was released for only one or two hours, waiting for some crew to come and tow him in, or for some train to deadhead him in, that time was not to be deducted, because it was not a part of his legal rest period; but that part of that article has never been carried out, and a number of roads do deduct the time, it may be only an hour or an hour and a half before another crew comes along, or a passenger train comes along to deadhead in, and that time is deducted out of the time between terminals, and they are not paid for as per Article 5.

It is perhaps true that there have been some improvements on some roads in regard to the number of crews tied up under the law. It is also true, perhaps, that the Government is more active today in enforcing the law than ever before, and is collecting more penalties than ever before for the violations of the law.

They talk about always tying up where there is a place to sleep and a place to eat. It is an actual fact, gentlemen, that some of these roads make it just as bad as they possibly can, and they care no more about tying a man up at some blind siding, where there is no place to eat and no place to sleep, than if he was not on earth. The man is the last consideration of all; and when we have had a number of these cases up and talked with them about it, they have said, "You got the law. Now, you take the effects of it."

Counsel for the railroads also quoted the Eastern Arbitration Award for the Engineers in regard to crews being held away from home, wherein it shows that engineers in unassigned freight service held twenty-eight hours at other than designated home terminals without performing service, are to be paid overtime rates, and so forth. He failed to read the Firemen's Arbitration, where the time is eighteen hours instead of twenty-eight.

The Chairman: Why did they make that discrimination?

Mr. Stone: It was a new departure, and we were the first ones. That is the only way I can explain it. They followed on along after us, and they improved a little on what we got, and perhaps they had a more liberal Board than we had. We had a rather queer combination of a Board. We had five neutrals, and one from the railroads, and one representing the railroad men; and occasionally the five neutrals, for fear they would be contaminated by the rest, would go up town and hold a meeting of their own, away from the other two representatives of the Board, and then they would come down, and when the representative of the railroads and the representative of the men agreed that something was right and that we should have it, they would proceed to run the steam roller over both of them, and say we could not have it.

Mr. Nagel: You are protected against that. We are not as queer as that, because we have only two neutrals on this Board.

Mr. Stone: I know that, and I guess I am to blame as much as anyone, for having an equal division on the Board, so that no one party should hold the balance of power. I learned by sad experience in the East, that it is a beautiful theory, but it did not work out very well in practice.

Mr. Sheean also quoted the Award on the Burlington. I believe it was by an Arbitration Board in 1914; but I will pass that without comment, because I do not care to express my private opinion about it, not in public at least.

But, gentlemen, the man's whole stock in trade, his whole asset, all he has to sell, is his time; and when you take away so many hours of his time you have taken away that much of his capital stock that he has to sell. When a man has only twelve years as the average term of life for the engineer, and he has got just so many hours in life to sell, when you run him out to some outlying terminal away from home where he is on expense, and hold him there over fifteen hours, I believe it is only fair that the company should pay him for that time, because they are using the only thing he has to sell, and they are depriving him of the opportunity to sell it anywhere else.

Regarding the question of deadheading, I know that Mr. Sheean makes the statement all the way through that we have

not proved our case. I believe he goes so far in this as to say, "no testimony having been offered to show either changed conditions or any inadequacy in compensation under existing rules, we ask that the Board give it no consideration."

I am going to ask the Board to give it consideration, and I believe you should, for this reason: whenever the necessities of the business demand that a man should be deadheaded, I believe that he should be paid the same as the man operating the locomotive, either engineer or fireman. He may have been one or two days getting up to "first out" on the extra board. He is called to deadhead down the road, and perhaps inside of thirty minutes or an hour after that, the next man on the Board is called to go out on one of the heavy engines, and that man who has been called to deadhead loses a chance to earn the money that he would have earned if it had not been for the dead-heading.

Regarding this question of guaranty on the Omaha, 2,600 miles per month, it does not really mean anything, and it does not cost the company any money. They see to it that the board is cut low enough all the time so that the men make away above 2,600 miles.

Mr. Sheean read to you yesterday a part of the working agreement between the engineers and firemen. He read part of Article 11, but he did not read all of it, and that is the working agreement between these two organizations at the present time. We have not been able to have all the railroads agree to it yet. We hope the time will come when we will. But here is our idea of the way these extra men should be taken care of, so they will not starve; and this is the working agreement between these organizations, and we are going to use every effort in our power to bring it about:

It shall be the policy of both organizations, when working jointly, to insist upon having a guaranteed monthly wage of not less than \$100 for all extra engineers and not less than \$65 for all extra firemen retained in service; and when the minimum wage is guaranteed, no reductions in force will be insisted upon by either organization. We believe that will solve one of the problems of the unemployed.

Regarding this question of hostling, so much has been said that it seems almost useless to say any more. They would have

you believe that we want the closed shop. They are worrying about some of these poor fellows who are going to be shut out by our closed shop policy. Gentlemen, that is not what is worrying them at all. The thing that worries them is for fear we will get this article adopted, and they will have to pay something to the man who fills the position of hostler. That is what they are worrying about.

There is nothing whatever in our request that will prevent the company employing this man who cannot talk United States. In railroad parlance they call him a "wop." They can employ this "wop" as a fireman if he can pass the necessary examinations; and after he has had some experience as a fireman and can pass the necessary examinations, they can set him to hostling if they want to. There is nothing in the rule that makes a closed shop.

Mr. Sheean dwelt at length upon this 47th Street roundhouse of the Rock Island out here, where everything was so highly specialized, that you heard Mr. Clewer talk about. If my memory serves me right—I cannot recall all that has been said during this long war of words—I think they pay two cents an hour more out here at this highly specialized plant than they do down at Little Rock for the negro hostler. I think there is a difference of about two cents an hour.

The Great Northern pay, and have experienced men for handling engines, and they do not have any trouble about getting men to fill hostlers' jobs.

The plea was made that these old, disqualified engineers would be shut out by this rule. If you will give us this rule we will take the chances that our old, disqualified engineers will not be shut out by it. I have faith enough in the Firemen's organization to believe that they will give us a square deal, and that in case we have some old, disqualified man, he will be allowed to take a place as a hostler. We recently had a case, however, where an old, disqualified engineer could not pass the examination for hostler, because it was so rigid. The great trouble is, the railroad companies want the cheapest kind of foreign labor market and get the man who knows absolutely nothing—who cannot talk our language—to do this work around these roundhouses.

There is nothing whatever in the theory that a machin-

ist's helper learns to run a locomotive. That theory was destroyed long ago, when they tried some of them as strike breakers, and they were a complete failure.

I think Mr. Sheean made the statement that there was absolutely nothing about the work of the fireman that qualified him especially for the service of filling the position of a hostler. I think I am quoting him about correctly. I do not claim to give his exact words. Evidently Mr. Trenholm does not agree with that, because he says, where he is quoted at page 85 of the brief:

"Of course, a fireman having served some time as a fireman, becomes fully competent to be a hostler and handle an engine."

So, evidently there is something about the work of a fireman that fully qualifies him for filling the position of a hostler.

Regarding the surprise tests, I have said all I care to say except this: the State of Kansas enacted a law that made it a criminal offense to turn switch lights to red. Yet in spite of that law these companies continue to make these tests. The fact that this law is on the statute books clearly indicates that there are some other people besides the engineers and firemen who are interested in these tests. The thing I fear, gentlemen, is that unless a solution is found for these surprise tests here, it will go on and on, until some of our men will take it into their own hands, and settle it for all time. That is what I fear. I have a fairly good grip on my temper, and the brake holds pretty well; but I want to say to you that if I went through some of these surprise tests that some of these men have gone through, after I had stopped I would proceed to beat up the fellow that made the test, if I never ran another rod on that road. There would not be any question about it. He and I would mix; and that is what is going to happen some of these nights with some of our men, and you are going to send for a coroner instead of anybody else.

Regarding assistance for firemen, I have heard a great deal about that, and they wondered where productive efficiency came in when you had put the second man on. Gentlemen, where does productive efficiency come in when, by adding one more car to your passenger train you have to put on a second engine? It is a necessity of the business. You have got beyond the limit of one engine; and this request of ours is one of the necessities of the business. You have got beyond the limit and the capac-

ity of the man. Talk about steamships! When steamships get big enough they simply add more firemen, that is all. And it is not a question how much bigger these engines are going to be. It is not a theory but a condition that confronts us. You have got beyond the limit of one man to keep coal in these engines. You can show all the charts you want to, drawn out in figures like those which Mr. Tollerton showed here, but you cannot make any practical railroad man who has been in the game believe for a minute that the railroad firemen has not now gone beyond the capacity of human endurance in trying to keep coal on these engines.

We have brought, not one but a dozen men here, to disprove the statements made by Mr. Tollerton, and we have shown that these test trips they put up are absolutely not correct, and that the figures had been doctored for the record that was made; but I do not think anything in this whole case, in the testimony of all the witnesses has impressed me as much as the appearance on the stand here of this man, J. C. White from the Burlington, who sat here and testified in rebuttal; a man at the age of 31, burned out; simply a human cinder, at an age when he ought to be at his best. You can put up all the charts you please, and you can say that he rested over 67 per cent of the time, and that he did not pull down coal six minutes, and all that, but you cannot make any of our men out in the field, in the actual service, believe any such thing as that. They would not believe it in a thousand years, because they know it is not a fact. Man after man has come in here and testified that the engineer and brakeman helped him pull down coal, and another man testified that the engineer and another man were spading coal in to him at the same time. Another man testified that with the automatic stoker working to full capacity, and another man helping out with a scoop, they could manage to keep coal in there. You cannot make me or anybody else believe, in the face of such testimony, that they were only putting in six scoops of coal every ten minutes. The fact of the matter is, when one of these big battleships goes into action, the poor fellow never gets a chance to straighten up. He is generally about two scoops full behind and trying to catch up.

If Mr. Sheean had ever stood before the door of one of these "battleships" when the draft was on her right, he would

not make any talk about these men being at leisure part of the time, reclining at ease, looking out of the window or anywhere else. The fireman is right smart busy.

Here is the position of the railroads in the Conductors' and Trainmen's case in the Eastern Arbitration, reading from page 26 of the brief:

"The question of the full-crew problem is identical with that of an additional fireman, with this exception, that in the latter case the railroad may secure higher locomotive efficiency, and are thereby enabled partially to offset the increased outlay in wages due to the employment of the additional man, but in the case of the additional brakeman there is absolutely no opportunity for additional return."

So it seems as if, with the full crew in the East, they expected the brakeman to help the fireman out.

Again, they say we have not proved our case. Gentlemen, if the testimony of all these men who have testified here does not disprove the statement made by Mr. Tollerton, I do not know what evidence is. And when they talk about these men being satisfied, and about us labor leaders leading them on, why you men who have been here and have listened to their story day after day, and have looked into their faces, know they are not the type of men whom anybody could lead very far, if he was not about right. The very training of these men makes them self-reliant, and makes them decide things for themselves; and I am satisfied that they impressed you with the truthfulness of their story and their statements in regard to the actual service that they are giving from day to day over this vast territory.

And by the way, Mr. Sheean made the statement that we did not put a passenger engineer on the witness stand. I think he forgot Engineer Armstrong of the Canadian Pacific, up there where it goes down to 54 below zero, and where the government record shows 18 feet of snowfall, and a few other things.

Regarding this miscellaneous proposal of ours under Article 14, cleaning of locomotives, setting up wedges, filling grease cups, cleaning headlights, and placing of supplies on locomotives, there again they got Engineer Young of the Union Pacific. He was the only one out of whose testimony they could get any comfort, of all the witnesses we had, and they say

a watchman is not competent to set up wedges. But according to Mr. Tollerton, and according to the counsel for the railroads, a watchman is fully competent to act as hostler on an engine. And you would think that they set up wedges about four times a day, to hear him talk about it, when the fact is they set up wedges once or twice a month, when the engine comes into the shop for other necessary running repairs.

They talk about these men at outlying points on these branch lines having soft snaps. Gentlemen, some of the heaviest service we have, and some of the heaviest locomotives in service today in the Western territory, are on so-called branch lines.

Another thing. If there is such a thing as a light branch service, if you go out to see who is there you will find some old man who bid it in because he broke down in the main line service, and took that as a last resort, in trying to round out a few more years before he went to the scrap heap.

Regarding the question of throwing switches and flagging, we have heard a whole lot of talk about that passenger fireman down here at Savannah on that Burlington run. I haven't heard any of them say why in the world the brakeman could not go down with the train and throw two or three switches. The passenger brakeman can get off at the depot, but the passenger fireman gets off to throw the switches, taking chances of getting hurt, in addition to his duties as fireman. I don't believe it is any part of a fireman's or engineer's duties to throw switches or flag through blocks. We believe there should be two men on the modern locomotive at all times when she is under steam, and when she is being operated.

In addition to that, I don't believe it is fair to ask the fireman who is dripping wet with perspiration from trying to coal one of these big "battleships," to get off and dig out a frozen switch or something of that kind, or to flag through a block.

We speak of the high rate paid to these men. Why, they are nearly all at some isolated point in this pusher and helper service, assigned to service at some outlying point. And if they are not assigned there they are called from the pool board. Much of the pusher and helper service is called from the pool board.

On page 99, Mr. Sheean has a very carefully and adroitly prepared table. He presents there a statement of earnings of engineers and firemen who received more than \$150 during the month of October, 1913. The introduction to this table is as follows:

"On sheet No. 4 of said Exhibit 29 (which includes both engineers and firemen) 2,386 are shown to have earned between \$150 and \$158.32," etc:

We desire to caution the Board against falling into the error of understanding that this table does so include both engineers and firemen to any considerable extent. For, in this table, only 15,176 engineers and firemen are accounted for out of a total of 63,624 engineers and firemen reported in the Railroads' Exhibit 29, sheet 1. Without even suggesting that there was any intention on the part of counsel for the railroads to produce the wrong impression in the minds of the Board, we desire to call the attention of the Board to the fact that in this table the earnings of 48,448 engineers and firemen are not accounted for by counsel for the Railroads.

The attention of the Board is called to the information found in the Railroads' Exhibit No. 45, one of the last efforts of the railroads to convince the Board that the wages of engineers and firemen were already too high in switching service. This Exhibit was presented in rebuttal, and may be said to have been their last word upon the subject. The earnings of five engineers and five firemen for the fiscal year 1914 are there reported and in connection therewith is also reported the hours on duty.

The following computations have been made from Railroads' Exhibit No. 45 for the express purpose of illustrating that with high earnings will be found excessive hours of service, and I shall read the following:

Average number of hours worked per day, for entire fiscal year:

Engineers.

Fred T. Schultz.....	14.01
Eugene Moore	13.29
Edward Monahan	13.54
Edward F. Quilter	12.97
John H. Joslyn.....	12.48

Firemen.

P. Codd	14.11
Geo. L. Grote	13.87
Victor Schultz	13.32
Fred Hoppke	13.42
H. W. Schramm	12.66

From the foregoing table it will be seen that in order to earn these high amounts, approximately an average of 13 hours of work was performed for every day worked during the entire year by all of these engineers and firemen, and this time does not include time for which no compensation was paid. Further examination of this table shows that, notwithstanding the apparent large earnings for the year, the highest rate of wages earned by any engineer was 45 cents per hour, and the highest rate earned by any fireman was slightly less than 27¼ cents per hour.

When we have insisted that switch engineers and firemen should be limited to ten hours' employment per day, and have requested that time-and-one-half for overtime be paid after ten hours for the express purpose of preventing these men being required to work more than ten hours, the railroads have insisted that the exigencies of the service demand that these men work these long hours and seek to avoid the payment of time-and-one-half for overtime. Yet, they have the effrontery to present the earnings of these same men who have been required to actually work thirteen hours out of every twenty-four hours, as reasons why the rate per hour for engineers and firemen should not be advanced.

We submit, gentlemen of the Board, that the attitude of the Railroads in this matter is not only inconsistent, but unfair, and the Board should only take into consideration the rate paid per hour, and the railroads should not be permitted to benefit by the fact that they have compelled these men to work unreasonable hours.

And the same holds good, gentlemen, in regard to the passenger engineer who made \$3,725 and reeled off something like 62,000 miles. I hope you will live long enough to see the time come when it will be a crime punishable by law, for any railroad to allow any man to make that many miles in a year, because I don't believe that man is doing justice to himself, to the

company he works for, or to the traveling public that he pulls over the line. Sixty-two thousand miles! Almost two and a half times around the world in one year with a fast passenger train.

Yesterday I spoke of the hazards of the vocation, including the hazard of losing his position, and the age limit. We also, early in the proceedings, called your attention to the reference system in vogue on these railroads, which is nothing more or less than a "black list," and the strongest proof of the fact that the railroads know it is a black list is their requiring the applicant for a position to sign a document releasing the company from any and all liabilities for damages. A man in any other vocation can make an honest mistake and he is not followed to his next employer. A man commits a crime and is punished, but always has the chance to redeem himself. An engineer, who is only human, makes a mistake, or, under the stress of circumstances, loses his head and talks back to an official. He is promptly discharged. The loss of his position is punishment many times over for his one mistake. The loss of his position, which required years of service to obtain, paid the debt in full. But they don't stop there; he is placed on the undesirable list; he goes to some other road and starts in at the bottom (if he succeeds in getting a job at all) and takes up the broken threads of life and starts over again.

He works two, three or four months, gives perfect service, and then is called in, and he is told his service is everything to be desired, but his reference is unsatisfactory, and his services are no longer required. And again he pays that old debt over again. And he repeats the same performance on another road, and on another road. Once they get it in for a man they never quit dogging him until they make his wife and children hungry and they make him a tramp.

And that is one of the things that must be taken into consideration, including many other things, including the hazard of the profession, the short term of life, and all those things should be taken into consideration in concluding what is a fair, equitable wage for the railroad engineer.

Now, gentlemen, I realize that in this long war of words we have talked until you are perhaps worn out. In conclusion I simply want to repeat what we have said before: There is not

a single request we have made for these men but which, in our opinion, should be granted without scaling down. They are, in our opinion, entitled to even more than we have asked for.

These questions before you are so big and vital, and so far reaching, that even now we have only touched a few of their many phases. We have tried to place before you the true facts as they exist. We honestly believe these men are justly and equitably entitled to all they ask, for if ever there was a class of men who performed their duties conscientiously and who were true to the trust committed to them, the men in the cabs of the locomotives on our modern American railroads certainly belong to that class. The fact that years of training and the load of responsibility they have carried has made them conservative is no reason why the railroads should seek to capitalize their conservatism.

I want to impress upon you as a last word the importance of this case before you. I question if any body of men in the world will ever be called upon—in our day, at least—to decide matters that will have so far reaching an effect. Upon your decision largely depends the question of whether we have reached the dawn of a new era, and whether arbitration shall still continue to be the plan of settlement of these great questions, or whether we are going back to the old days again. And, gentlemen, I hope that you will have the courage of your convictions, and simply settle these questions, instead of referring them to some other Board later on. I don't take any stock in this make-shift policy of putting it off, putting it off, putting it off as various other Arbitration Boards have done, and I hope that you gentlemen will be big enough, and I believe you will, to decide these questions and say what it is going to be. And I believe that if we can get the right kind of settlement, a settlement that is fair both to the railroads and to the men, that you will have settled this vexatious problem for many years to come. It has been five years since we had our last wage movement, and I hope, if we get the right kind of settlement, it will be even longer than that before we have another one, if ever.

We submit our case to you, gentlemen. We believe that you will weigh the matter carefully, and we believe you are big enough and broad enough to have the courage of your convictions. And whatever may be your decision, regardless of

whether we get all of the things we have asked for—and I repeat again, I believe we are entitled to all we asked for—or whether the Award be good, bad or indifferent, I want to say to you as the Chief Executive of the Brotherhood of Locomotive Engineers that we will accept that award, and we will carry it out in good faith during the term of the agreement.

Before I close, I want to again extend the thanks of the organization to the Board of Arbitrators, and to add to that my personal thanks, and I also want to thank my friends, the enemy on the other side. There is just enough Dutch and Scotch in me to enjoy a good scrap, and you certainly have given us a run for our money.

Now, gentlemen, as the last word. The whole world of labor, not only in the United States, but the whole world, is watching the outcome of this case, and we leave it with you, believing in the justice and equity of our cause, and believing in the fairness and good judgment of you men who are going to decide the questions involved.

Gentlemen, I thank you.

The Chairman: It has been suggested that perhaps as a matter of precaution we should take a little additional time in which to file our report. I hope that we will be able to have this report in by the 15th. That is what I am hoping for. But we do not know what may occur when we get in the other room, and we want to do the very best we can to settle this matter so that there will not be any "hereafter" about it. That is the way I feel in regard to the matter. I feel that if we proceed very cautiously there will be no doubt as to what we are going to do in the matter.

And in this connection, I want to personally, and on behalf of the Board, extend to the representatives of the parties here my heartfelt thanks for the very able and polite manner in which they have presented these questions. The testimony on behalf of the men indicates a high degree of intelligence, and indicates a desire on their part to do right. Likewise the testimony on behalf of the Managers is sufficient to satisfy me that these Railroads are in good hands. And I want to thank the men and I want to thank the Managers for the straightforward and manly way in which they have presented the evidence from which we are to determine the questions of fact that are necessary in order

to reach a correct conclusion as to the issues involved in this controversy.

I thank you, one and all.

Now as to the stipulation. It has been suggested, gentlemen, that perhaps we should take ten days more in which to make our final report, in the event that we should need it. I sincerely hope, and I really believe that it will not be necessary to consume that time.

Mr. Sheean: Well, is it the wish of the Board that we make that stipulation now?

The Chairman: I think perhaps it would be best to do so now. The Board is powerless to extend the time without the agreement of the parties, and such being the case I thought it would be best, before the record is closed, to have an entry made of it.

Mr. Stone: It would be entirely satisfactory, Mr. Chairman, speaking for the employes, to extend the time, if you find it necessary. I hope, however, that you will not find it necessary.

The Chairman: That is my hope also.

Mr. Stone: But if it is your desire that we enter into that agreement at this time, we will do so.

The Chairman: Well, the request has been made by members of the Board—not the neutral members, but the other members—and I want to avoid the possibility of being criticised for not giving these gentlemen full and ample opportunity to be heard. I will be ready at the time designated, but I want to be sure that these gentlemen will have all the time they want in the matter.

Mr. Sheean: Was it the thought that the Secretary prepare the stipulation for us to sign? You, Mr. Stone, spoke of leaving tonight for Cleveland.

Mr. Stone: Yes. But I will be back the first of the week and I can sign it then. Mr. Carter is to be in Peoria tomorrow, but it can be signed later, and be made a matter of record at this time.

The Chairman: Yes.

Mr. Stone: I will be back the first of the week, and will sign it at that time.

Mr. Carter: Mr. Chairman, speaking for myself, I shall be ready to sign it at any time it is presented.

The Chairman: Well, you can prepare the stipulation and it will be filed among the papers in the case so it will be in the record.

The Board will now adjourn until 10 o'clock tomorrow morning.

(Whereupon, at 4 o'clock P. M., on Friday, April 2, 1915, the hearings were closed, the Board adjourning to meet in conference on Saturday, April 3, 1915, at 10 o'clock A. M.)

ARBITRATION

BETWEEN

THE WESTERN RAILROADS

AND

THE BROTHERHOOD OF LOCOMOTIVE ENGINEERS
AND THE BROTHERHOOD OF LOCOMOTIVE
FIREMEN AND ENGINEMEN

Under the Provisions of the Act of
Congress Approved July 15, 1913

Regarding Wages and Working Conditions of Locomotive
Engineers, Firemen and Hostlers

BRIEF AND ARGUMENT ON BEHALF OF THE
ENGINEERS, FIREMEN AND HOSTLERS

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I. STANDARDIZATION OF RATES OF WAGES AND RULES OF EMPLOYMENT OF LOCOMOTIVE ENGINEERS, FIREMEN AND HOSTLERS.

The Engineers, Firemen and Hostlers respectfully submit that minimum rates of wages, rules guaranteeing the minimum compensatory benefits, and rules limiting maximum hours of employment for a day's work, should be standardized, or made uniform on all Railroads participating in this Arbitration, for the reasons that:

(1) In equity, Railroads should not be permitted to perpetuate discriminatory rates and rules that adversely affect the earnings and working conditions of Engineers, Firemen and Hostlers.

(a) By the adoption of concerted actions of certain groups of Railroads and their employes, and the abandonment of wage negotiations on the several Railroads, Engineers, Firemen and Hostlers have been deprived of other means of securing uniformity of wages and working conditions. This change in method of negotiating wage agreements became necessary; the Railroads that had advanced beyond others in rates of wages asserting that no additional concessions would be made so long as competitors paid less. Thus, Engineers and Firemen suffered loss because of their inability, without resort to strikes, to induce these competitors to be fair. Henceforth if wages are to be standardized it must be through the joint action of the accredited representatives of the Railroads and of the Engineers, Firemen and Hostlers. If Arbitration is to supplant other methods of adjusting wage disputes arising between Railroads and their employes, it will be incumbent on Arbitration Boards to standardize wages and rules, if wages and rules are to be standardized. The Congress of the United States having deemed it necessary to enact a Federal Law providing for a method of avoiding conflicts between the Railroads and their employes which might result in the interruption of traffic, neither

the Railroads nor the employes should bring about a condition that will materially affect the business of the country.

(b) When separate wage schedules were negotiated, the rates of wages and conditions of employment depended upon the liberality of the Railroad, or upon the strength of bargaining power of the organization of employes

If one Railroad was operated under a policy that prompted recognition of the rights of its employes that policy was reflected in the wage schedule. If those who directed the affairs of another Railroad made no concession, that policy affected the wages paid. Thus, a disparity of wages began to develop.

As employes of the several Railroads began to combine in organizations another influence made itself felt. On Railroads where the employes by force of numbers and aggressive action secured wage increases and improved working conditions, a higher standard soon was established. On Railroads where employes did not possess or develop such influence, wages and working conditions lagged in progress.

It is now proposed that Arbitration do that which has been left undone by an absence of liberality of employer or strength of collective action of employes. We respectfully submit that all wages and rules be brought up to the standard set forth in the Proposition submitted for Arbitration.

(c) Assuming that wrong exists where wages are now low and conditions less desirable, it is respectfully submitted that the wrong should be rectified by this Arbitration. No longer is the individual Railroad privileged, through a more liberal management, to increase wages or improve conditions, regardless of how low those wages are or how undesirable those conditions may be. No longer may the Engineers, Firemen and Hostlers on a single Railroad, by their own initiative, force their wages and working conditions up to a level with others. It has been the contention of the Railroads that once an adjustment is made for a number of roads collectively through a concerted wage movement, no wage increase should be granted by any Railroad except by the same method that fixed existing rates and rules.

(d) Fortunately, there is no great diversity in wages and rules. Having regard for the exaggerated estimates of anticipated expense in past wage movements it should be no great burden to the Railroads to standardize at the wage level fixed in the Proposition submitted for Arbitration, for it has not been the intent of the Engineers, Firemen and Hostlers to interpret or to apply any proposed rule in a manner that will unjustly burden the Railroads.

(2) The standardization of rates of wages and hours of employment, for like service, has been recognized as equitable and an economic necessity in many leading industries.

(a) So long as one employe has been paid a lower rate of wages than another employe in the same class of service and in the same competitive district, industrial unrest has been a marked feature of the history of organizations of labor. Particularly was this influence felt in the mining industry where formerly each mine was operated under a separate wage schedule, at which time strikes were constantly recurring at the mines where wages were low, solely for the purpose of securing as high a wage rate as was paid in some neighboring mine. Nothing has been so productive of content and industrial peace among coal miners as the standardization of miners' wages.

(b) Mine operators, master printers and employers in the the building trades recognize the benefits of uniformity of wages and working conditions. Before the standardization of miners' wages in the same competitive field the mine owners' business was extremely precarious, subject almost entirely to the ability of his neighbor to reduce the wages of employes. The mine owner who was most successful in decreasing the wage cost of his coal drove his more humane competitor from the field or else forced him to also reduce wage costs.

A serious complaint of the master printer is that the International Typographical Union permits different wage scales in the same competitive district.

Nothing has been more satisfactory to the building contractor than the elimination of doubt as to what his competitor will pay for labor.

(3) The "saving clause" agreed to by the Committees representing the Railroads and the Engineers, Firemen and Hostlers, which saving clause is made a part of the written agreement upon which this Arbitration is based, is not prejudicial to uniformity of minimum rates of wages and rules of employment, as set forth in the Proposition here arbitrated.

(a) In their efforts to secure a standardization of wages and working conditions of Locomotive Engineers and Firemen on these Western Railroads they have not attempted to secure a standard rate higher than already in effect, except for certain large locomotives for which no commensurate wage has been secured since their introduction. Engineers and Firemen believe if they,

at this time, secure that which they have asked they could not be accused of making radical demands, but, having made a conservative wage request, they were compelled to protect those who were receiving higher wages than requested, and those who were working under more favorable rules than requested, by insisting that such higher wages or better rules be maintained. This so-called saving clause that is a part of the Arbitration Agreement, is, of itself, proof that the request is conservative.

(b) This saving clause is essential, and made so by the ability of the Railroads in past Arbitrations to convince Arbitration Boards that wage requests, if granted, would financially embarrass Railroads. This saving clause saves railway employees

from awards made under such influence.

(4) In the fixing of wage scales in other industries it is only the minimum rate of wages that is standardized, thus recognizing the equity of exceptional higher rates, and in fixing the basis of a day's work it is only the maximum period of time that is standardized, thus recognizing the equity of exceptional shorter periods of service for which a day's wage may be paid.

(a) To prohibit the payment of a higher rate than fixed as a standard would prevent a liberal employer from sharing his profits with his employees, as has been done recently in the automobile industry.

(b) In many industries where a minimum wage rate is a part of wage agreements some employers insist on paying a higher rate, as is the practice in the printing trades.

(5) The uniformity of rates and rules affecting the compensation of Engineers, Firemen and Hostlers should not be avoided by the relative wealth of railroad corporations.

(a) In no other industry does the increased wealth of the employer find itself reflected in the wages of his employee; in fact, the more powerful and wealthy industrial corporations usually pay the lowest wage.

(b) The rate of wages paid by building contractors, master printers and other employers are in no way affected by the amount of property on which they pay taxes.

(c) The profits on the labors of Engineers, Firemen and Hostlers are as great on Railroads whose funds have been dissipated as on Railroads that have accumulated vast surpluses.

(d) In past practice it has not been the most opulent of the railway corporations that have paid the highest rates of wages to their employes.

(e) Loss of traffic by Railroads first affects the earnings of Engineers, Firemen and other Employes engaged in the operation of trains. Seasonal fluctuations in the amount of freight transported by a Railroad results in greater loss to Engineers and Firemen than to the Railroad by which they are employed. The loss of earning power of the Railroads by the recent depression in business is proportionately not so serious as the loss sustained by Engineers and Firemen resulting from the same cause. Railroads pay wages to Engineers and Firemen in Freight-Service only when freight is moved; therefore, with every depression in the business of a Railroad there is a decrease in expense to the Railroad and a loss of earnings by the Engineers and Firemen. With proper conservation of railway revenue, a Railroad should be as able to increase wages of Engineers and Firemen in 1915 as in 1913.

(f) The Federal Courts have held that inability to pay dividends on stocks and interest on bonds, or the necessity for issuance of receivers' certificates to defray expenses of operation, are no cause for deviation from uniformity of rates of wages paid railway employes.

(g) The Federal Act under which this Arbitration is held, guarantees special consideration to employes of bankrupt Railroads, in charge of receivers appointed by the Federal Courts.

(h) In Exhibit 9 the Railroads show in numbers and by diagram the freight density, or ton miles per mile of line, for all the Railroads participating in this Arbitration. Presumably the Railroads contend that with increase in freight density the ability of Railroads to pay higher wages is made greater. It appears, from Exhibit 9 of the Railroads that under this theory the Railroads most able to pay high wages actually pay less wages to Engineers and Firemen.

(6) The Railroads now seek, and profit by uniformity of National legislation affecting their financial management and physical operation and oppose variant State legislation affecting the same matters, and are privileged to purchase materials for construction, maintenance and operation in a market where prices are uniform.

(a) Committees representing Railroads in legislative matters have favored National laws supplanting State laws because of the lack of uniformity of the latter.

(b) A Federal Act prevents discrimination in freight and passenger rates and requires uniformity.

(c) The Interstate Commerce Commission requires of one Railroad only that which is required of all Railroads.

(d) The Federal Safety Appliance Laws apply to all Railroads in like manner.

(7) The institution of uniform rates and rules will make impracticable the distortion of existing facts and the exaggeration of anticipated expense of a proposed wage increase, which has, in past practice, partially defeated the true purpose of the Federal Arbitration Acts.

(a) In Arbitrations the employes are unable to disprove the statistical information prepared and presented by the Railroads because they are denied access to the Railroads' pay rolls. The men know, from experience, that they are longer in going over a division with a modern heavy train than formerly; they know from experience that a far greater amount of coal is being burned; they know many things from experience that the Railroads seek to disprove by the compilation of an appalling array of figures that cannot be verified or impeached. It is only when railway officials become confidential with each other in their technical discussions that employes find comfort in their statements, and are enabled thereby to quote their sincere opinions.

(b) Within the past two years we have been confronted with a threatened strike of Locomotive Firemen and Hostlers in the Eastern States for the purpose of compelling Railroads to arbitrate wage disputes under a Federal Law. In this wage movement a strike of Locomotive Engineers, Firemen and Hostlers in the Western States was insisted upon for the purpose of avoiding an Arbitration under the Federal Law. This change of sentiment is the direct result of an apparent determination on the part of certain Railroads in the past to wrongfully interpret Arbitration Awards, and the apparent ability of the Railroads in the past to overwhelm an Arbitration Board with a mass of statistical evidence, much of which is based upon exaggerated, if not grossly inaccurate reports prepared by obscure clerks of these same Railroads, clerks not under oath and entirely unknown to any member of the Arbitration Board.

The valuation of the property of Railroads, appraised by themselves for purposes of taxation, is seldom given serious consideration, and we ask that this Board of Arbitration give only the same consideration to the estimates made by the Railroads in their Exhibits as to the cost of this Proposition.

(c) It is well known by all railway operating officials that much of the cost of what is termed "arbitrary" rules may be and has been avoided by removing the cause of complaint. In securing information for the preparation of these estimates specific instructions were given the Railroads not to assume that changes will be made in the service in order to meet different conditions. Thus, over \$321,000 is estimated in Railroads' Exhibit No. 3 to be the increased expense of Terminal Delay, for only one month, when most Terminal Delay would be avoided by the proper attention to the calling of engine crews, and by moving engines to the proper place of delivery at end of trip. The employment of Hostlers would in nearly every case avoid all Terminal Delay to Engineers and Firemen, except when departure of trains are delayed, yet we find the expense of Hostlers and Terminal Delay both included in the Railroads' exhibits, thus, to a great extent, duplicating estimates of expenses.

The Railroads are standardizing track, bridges, block signaling, equipment, rules and practices. Why should they not standardize wages and discipline just as the government would do if it owned and operated the Railroads?—(*W. L. Park, Vice-Pres. Illinois Central Ry.—Employes' Ex. 53, p. 13.*)

I would like to see standardization through the Western country, standardization of pay, standardization of rules, all taken together. Fair, equitable rules provided both for the railroad and for the man.—(*Railroads' Witness Trenholm, p. 4999.*)

Until such time as a standard basis of wages for Locomotive Engineers and Firemen is established on all railroads, graduated in proportion to the service required of them, it will be practically impossible to accurately determine the Average Rates of Wages of these employees.—(*Employes' Ex. 5, p. 3.*)

The Court shares in their (the receivers of the railroad) anxiety to have an economical administration of this trust to the end that those who own the property and have liens upon it may get out of it what is fairly their due. But to accomplish this desirable result, the wages of the men must not be reduced below a reasonable and just compensation for their services. They must be paid fair wages, though no dividends are paid on the stock and no interest paid on the bonds. * * *

In the opinion of the Court the allowances made by the schedules now in force are just and equitable, when all the conditions are considered. The employees, under the present system, share the burdens of diminished business. They make less mileage and get less pay per month. The rate now paid is not higher than the rate paid on other lines operated through similar country and under like conditions, and, in the opinion of

the Court, is not higher than it should be for the service rendered.—(*Oliver Ames, et al. vs. Union Pacific Railway Company, et al.*—*Eighth Judicial Circuit and District Court of Nebraska.*)

Employes of railroads operated under Federal receiverships given special consideration.—(*Sec. 9, Federal Mediation, Conciliation and Arbitration Act, approved July 15, 1913.*)

Standardization of railway equipment advocated by railroads.—(*Employes' Ex. 53, p. 13.*)

The proposed wages should in every case be figured upon the units of performance for October, 1913. It should not be assumed that changes would have been made in the service in order to meet different supposed conditions.—(*Instructions to Railroads for Estimates of Expense of Proposition—Railroads' Ex. 2, Sheet 1, Form 30.*)

II. THE PROPOSITION SUBMITTED FOR ARBITRATION.

The Engineers, Firemen and Hostlers assert that the Proposition now Arbitrated is equitable and should be awarded, and in support thereof submit the following presentation of each Article of the Proposition:

Article 1—Basis of a Day's Work.

One hundred miles or less, five hours or less, will constitute a day's work in all classes of passenger service. All mileage in excess of 100 miles shall be paid for pro rata.

One hundred miles or less, 10 hours or less, will constitute a day's work in all classes of service except passenger and switching service. All mileage in excess of 100 miles shall be paid for pro rata. Ten miles' run will be equivalent of one hour's service performed, or vice versa.

It is contended that the foregoing rule should be awarded, because—

(1) The high speed of passenger trains and the nervous and physical strain incidental thereto makes the five-hour day equitable in Passenger Service.

(a) As the speed of a train increases, the responsibility for observation of signals increases.

(b) As the speed of a train increases, the amount of coal consumed per hour increases.

(c) Passenger trains with but few exceptions are scheduled to complete a trip of 100 miles in less than five hours.

(2) The rates of wages for Engineers and Firemen are less per day and per hundred miles in Passenger Service than in other road service.

(3) Much of the time required of Engineers and Firemen in Passenger Service is in addition to the time included in this rule.

(4) The five-hour day for Passenger Service is already in effect upon a vast majority of the Railroads in the United States and Canada,

and many of the Railroads participating in this Arbitration have such rule, which should now be made the standard rule.

(5) When Engineers and Firemen employed in Passenger Service are required to exceed 100 miles in one trip the rate per mile for additional miles should be not less than the regular rate.

Speed is what burns coal.—(*Railroads' Witness Tollerton*, p. 4347.)

His work will be governed by the speed of his engine, based on his train.—(*Railroads' Witness Tollerton*, p. 4403.)

Speed of Passenger trains by Divisions and Systems.—(*Employes' Ex. 77*, pp. 1-17.)

Rates of wages for Engineers and Firemen less in Passenger Service than in other road service.—(*Employes' Ex. 2 and 4*; *Railroads' Ex. 1*)

Much time required of Engineers and Firemen in addition to time included in this rule.—(*Employes' Witness Jones*, p. 888; *Employes' Witness Hintz*, pp. 6808-09.)

Five-hour day with overtime twenty miles per hour, minute basis, standard on Eastern Railroads.—(*Employes' Witness Robertson*, p. 7219.)

The five-hour day for Passenger Service is in effect on a number of Railroads participating in this Arbitration.—(*Railroads' Witness Bremerman*, pp. 3027-28; *Railroads' Ex. 1*, p. 6; *Employes' Witness Cadle*, pp. 51-52.)

(6) The request for a ten-hour day in Freight Service is conservative, in that practically all railroads have as favorable or more favorable rule.

(a) Many of the Railroads participating in this Arbitration now have in effect a rule or practice that 100 miles or less, 10 hours or less is a day's work in all services except Passenger Service.

(b) As evidence of the ~~conservation~~ ^{conservatism} of this request reference is here made to the many Railroads that have already adopted the eight-hour day.

(c) If on any Railroad more than 10 hours is required in any service for a day's work such practice should be abandoned.

(7) The clause in this rule providing that all mileage in excess of 100 miles shall be paid for pro rata relieves Railroads from paying the overtime rate where the speed of the train is equal to or exceeds 10 miles per hour, thus, establishing for Railroads a more favorable rule than in other industries, where the overtime rate arbitrarily begins at the end of the "day."

(8) Ten miles' run in freight service should be the equivalent of one hour's service performed, or vice versa.

(a) When Railroads established the mileage basis, agreeing to pay a day's wages for 100 miles or less, 10 hours or less, a bonus or premium system was instituted, which should be maintained so long as the mileage basis of wages is preserved. The theory of the Railroads was that a full day's compensation paid an Engineer or Fireman for taking a freight train 100 miles in less than 10 hours was a premium on efficiency and industry.

(b) Until such time as the mileage basis of compensating Engineers and Firemen is abandoned and the eight-hour day, with time-and-one-half for overtime, is substituted therefor the old rule that 10 miles should be equivalent to 1 hour, and vice versa, should be maintained.

(9) As the intent of the rule is now in effect on many Railroads the language should be made uniform.

* * * I think, in the Railroad business today, that 100 miles or less, 10 hours or less, is a fair basis of a man's work, and anything in excess of that should be discouraged as much as possible.—(*Railroads' Witness Trenholm*, p. 5525.)

Many Railroads participating in this Arbitration have this or more favorable rule already in effect.—(*Railroads' Witness Bremerhan*, pp. 3034-35; *Employes' Witness Moore*, p. 108.)

Mileage in excess of 100 should be paid for pro rata.—(*Railroads' Witness Trenholm*, p. 4991.)

Article 1—Overtime in Road Service.

Overtime in passenger service will be computed and paid for on a basis of twenty miles per hour, at rate for each class of engine used.

Overtime in all other service except passenger and switching service will be computed on a basis of ten miles per hour, and paid for at the rate of 15 miles per hour, at rate for each class of engine used.

All overtime will be computed on the minute basis.

It is contended that the foregoing rule should be awarded because:

(1) The rate for overtime in Passenger Service should be at least as high as the rate for regular hours worked.

(a) The basis of a day's work in Passenger Service being 100 miles or less, 5 hours or less on a majority of the Railroads, a speed basis of 20 miles per hour, the rate per hour is one-fifth of a day's pay, which, at least, should be the rate for all overtime hours worked in Passenger Service.

(b) Railroads that now pay a lower rate for overtime than for the regular hours of service should be required to pay at least the same rate.

I think a man is entitled to as much for overtime, at least, as he is for straight time.—(*Employes' Witness Robertson*, p. 7222.)

* * * there is practically no such thing as overtime in Passenger Service. There should be no such thing. A man goes out and makes 100 miles in 3 or 4 hours. There is very seldom any question of overtime coming into it.—(*Railroads' Witness Trenholm*, p. 5541.)

Overtime seldom made in Through Passenger Service.—(*Employes' Witness Robertson*, pp. 7221-22.)

(2) The rate for overtime in Freight Service should be at the rate of 15 miles per hour, on a speed basis of 10 miles per hour.

(a) When the speed of a freight train averages less than 10 miles per hour, and requires Engineers to work more than 10 hours to the 100 miles, overtime should be paid for at the rate of "time-and-one-half."

(b) This rule is more elastic and less expensive to the Railroads than the overtime rule is to the employers in other industries, where the overtime rate begins at the expiration of 8 hours. The rule here requested relieves the Railroads of paying any overtime so long as the average speed of the freight train between terminals equals or exceeds 10 miles per hour, and in any event road overtime rates do not begin until the expiration of 10 hours.

(3) It is unquestionably shown by evidence submitted and statements of prominent railway officials that the heavy loading of freight trains is the direct cause of decrease in speed.

(a) When a freight train is overloaded the sole purpose is to increase the earnings of the Railroads from that train, and this purpose is accomplished usually by exacting longer service and more arduous service from the Engineer and Fireman.

(b) The overloading of freight trains, resulting in reduced speed, longer periods of employment and additional labors of the Engineers and Firemen, brings to the Railroads increased earnings and makes it profitable for railroads to adopt this rule, and it is unjust for them to oppose it.

* * * it would stimulate, no doubt, every operating officer, possibly, to a higher degree than he is now stimulated, if that be possible, to avoid overtime paid for on the basis of time and a half.—(*Railroads' Witness Trenholm*, p. 5588.)

"Time-and-one-half" requested as a penalty to prevent overtime.—(*Employees' Witness Cadle*, p. 57.)

Speed of less than 10 miles per hour changes wages from "piece work" to hourly basis.—(*Employees' Ex. 5*, p. 2.)

Rule requested is more elastic and less expensive than overtime rules in other industries.—(*Employees' Witness Carter*, pp. 508, 539-40; *Employees' Ex. 5*, pp. 93-104, etc.; *Employees' Ex. 83*, pp. 4-14, etc.)

Tonnage must be reduced if speed of trains is increased.—(*Daniel Willard*, Vice-President, C. B. & Q. Railroad, 1906; *Employees' Ex. 88*, p. 9.)

Overloading Freight trains increases labors of Engineers and Firemen and brings increased earnings to the Railroads.—(*H. D. Judson*, General Supt., C. B. & Q. Railroad; *Employees' Ex. 88*, pp. 6-7; *J. M. Gruber*, General Manager, C. B. & Q. Railroad; *Employees' Ex. 88*, p. 8; *Daniel Willard*, Vice-President, C. B. & Q. Railroad, 1906; *Employees' Ex. 88*, p. 9.)

(4) The Minute Basis of paying for overtime in all classes of Locomotive Service is equitable.

(a) Where the Thirty Minute Basis is enforced an injustice is done when Engineers and Firemen receive no compensation for 29 minutes of overtime. Where Railroads are required to pay a full hour's overtime for 31 minutes it is not fair to them. The Minute Basis is exact and fair to both employer and employe.

(b) The Minute Basis has been adopted on many Railroads and should now be made uniform on all Western Railroads.

Minute Basis is equitable.—(*Employees' Witness Cadle*, pp. 57-58.)

Overtime on Minute Basis already well established.—(*Railroads' Witness Bremerman*, p. 3271.)

Article 2—Rates of Pay.

The rate in passenger service on locomotives other than the Mallet type weighing less than:

	Engineers	Firemen
80,000 lbs. on drivers shall be.....	\$4.50	\$2.90
80,000 lbs. and less than 100,000 lbs. on drivers....	4.60	3.00
100,000 lbs. and less than 140,000 lbs. on drivers....	4.80	3.15
140,000 lbs. and less than 170,000 lbs. on drivers....	5.00	3.25
170,000 lbs. and less than 200,000 lbs. on drivers....	5.15	3.40
200,000 lbs. and less than 225,000 lbs. on drivers....	5.35	3.50
225,000 lbs. and less than 250,000 lbs. on drivers....	5.50	3.65
250,000 lbs. and over on drivers.....	5.60	3.75

In all classes of service except passenger and switching service on locomotives other than Mallet type weighing less than:

	Engineers	Firemen
80,000 lbs. on drivers shall be.....	\$5.00	\$3.25
80,000 lbs. and less than 100,000 lbs. on drivers....	5.20	3.40
100,000 lbs. and less than 140,000 lbs. on drivers....	5.40	3.50
140,000 lbs. and less than 170,000 lbs. on drivers....	5.60	3.65
170,000 lbs. and less than 200,000 lbs. on drivers....	5.80	3.75
200,000 lbs. and less than 225,000 lbs. on drivers....	6.10	4.00
225,000 lbs. and less than 250,000 lbs. on drivers....	6.40	4.25
250,000 lbs. and over on drivers.....	6.70	4.50

Mallet type engines, all classes of service, except switching service, weighing less than:

	Engineers	Firemen
250,000 lbs. on drivers.....	\$7.50	\$4.90
250,000 lbs. and less than 300,000 lbs. on drivers....	7.75	5.10
300,000 lbs. and less than 400,000 lbs. on drivers....	8.00	5.25
400,000 lbs. and over on drivers.....	8.25	5.50

It is contended that the foregoing rates of wages should be awarded and be based on weights on drivers of locomotives, because—

(1) Weight on Drivers is the most practical and preferable basis for standardization of wages of Engineers and Firemen.

(a) It is the basis of wages that partially compensates Engineers and Firemen for their increased productive efficiency, for as the size and power of the engine increases so does the tonnage of the trains transported increase, and also do the revenues to the Railroads increase.

(b) It is the basis of wages that partially compensates Engineers and Firemen for increased labors and responsibilities resulting from larger engines and heavier trains.

(c) It is the basis of wages that partially compensates railroads for loss of earnings on unimportant runs, where the smaller locomotives are generally used.

(d) It is the basis of wages for Firemen once demanded by the Railroads now participating in this Arbitration.

(e) It is the basis of wages for Engineers demanded by the Railroads in the Eastern territory.

(f) It is the basis of wages for Firemen proposed by the Railroads in the Eastern territory.

(g) It is more difficult for railroads to obviate the effects of wage increases by changing Weights on Drivers than by reducing the size of cylinders, as in the past.

(h) If wages are to be standardized some one basis must be selected, and no basis is more equitable to the Railroads and their Engineers and Firemen than Weight on Drivers.

The Proposition of the Managers' Committee as to the first of these two problems is that tractive power is the only sound method for determining Firemen's rates, and that weight on drivers is the simplest and best method of determining tractive power.—(*W. C. Nixon, Chairman, Conference Committee of Managers, Western Railroads, 1910—Employees' Ex. 3, p. 4.*)

Weight on drivers is the proper unit to differentiate in the wages of Enginenmen.—(*B. A. Worthington, Representative, Eastern Railroads in Engineers' Arbitration, 1912—Employees' Ex. 3, pp. 5-6.*)

I do not believe we can get away from the theory that the Engineer is entitled to his share of the increased productivity of his labor. I do not believe we can get away from that theory. I think he is entitled to his full share myself.—(*B. A. Worthington, Representative, Eastern Railroads in Engineers' Arbitration, 1912, Employees' Ex. 3, p. 6.*)

In 1903, this weight on drivers basis was put into effect, based upon the statements I made a while ago, that were made by the company officials, that that was the only proper method of determining a fireman's compensation, and they agreed with us that the fuel used was not a compensation-determining factor.—(*Employees' Witness Karn, p. 6927.*)

Railroads willing at any time to join in honest effort to go to basis of weight on drivers.—(*Railroads' Witness Trenholm, p. 5320.*)

Engineers and Firemen both contribute to result of increase of productive efficiency as weight on drivers increases.—(*Employees' Witness Carter, p. 405-06; Railroads' Witness Trenholm, p. 5301.*)

Responsibilities and labors of Engineers and Firemen increase with larger engines and heavier trains.—(*Employees' Witness Carter, p. 407.*)

No basis more equitable to Railroads and Engineers and Firemen than weight on drivers.—(*Employees' Ex. 3, p. 1.*)

(2) The rates of wages enumerated in this article of the Proposition are less than should have been requested, if all other compensatory features of the Proposition are not awarded in this Arbitration.

(a) Wages of Engineers and Firemen have never been commensurate with their labors, responsibilities and hazard of occu-

pation, and their wage increases of the past have not kept pace with their increased responsibilities, or their increased productive efficiency or the increased cost of living.

(b) Measured by the wages paid in other industries Engineers, Firemen and Hostlers are several years behind the wage progress of other American and Canadian workmen.

(c) The privilege, long enjoyed by railroads, of paying lower wages to their employes than is paid by other employers to labor less skilled, less responsible and who assume less hazard, should be considered by this Board of Arbitration in reaching their Award.

(d) The higher rates of wages paid by Railroads to Engineers and Firemen employed on the larger locomotives, as they have been introduced in the service, cannot be termed "increases" in wages, for it has been shown in evidence submitted by the Railroads that on the same class of engines, but heavier engines, there has been an increase in rates of wages of Engineers in the past 29 years of only 18 per cent in Passenger Service and 23 per cent in Freight Service. Within the past 26 years on the same engines Firemen have had their wages increased in Passenger Service 40 cents per day, or 20 per cent, and in Freight Service 70 cents per day, or 31 per cent. The slightly higher rates conceded on the larger engines, as they have been placed in service, have not been commensurate with the increased responsibilities and labors of Engineers and Firemen, resulting from the introduction of such large engines.

(e) The wage increase of 1910 for Firemen on all locomotives except on coal-burning engines in freight service was awarded entirely because the cost of living had increased during the period subsequent to the wage increase of 1907 and including the year of 1909. The wage increase secured by Engineers during the same year of 1910 was approximately the same percentage in the aggregate; therefore, it is fair to assume that Engineers were granted this increase on account of cost of living, rather than the proper recognition of their increased responsibilities.

(f) The wage increases of 1910 for Engineers and Firemen did not compensate them for the additional labors incidental to increased loading of engines of the same capacity, and did not recognize or give due consideration to the pronounced increased productive efficiency of Engineers and Firemen developed during the same period. We request that substantial recognition now be

given to the increased productive efficiency of Engineers and Firemen, neglected in past wage adjustments.

Rates of wages of Locomotive Engineers, Firemen and Hostlers have been and now are less than rates of wages paid in other leading industries.—(*Employes' Ex. 5, pp. 8-10.*)

Locomotive Engineers, Firemen and Hostlers have received less increase in wages, 1914 over 1907, and 1914 over 1910, than have employees in other industries.—(*Employes' Ex. 5, pp. 14-15.*)

Per cent increase granted Engineers and Firemen in Freight Service, 1914 over 1907, and 1914 over 1910.—(*Employes' Ex. 5, p. 6.*)

Only slight increases granted in past twenty-nine years.—(*Railroads' Ex. 38, Missouri Pacific Section.*)

Fifteen cent increase granted to Firemen in 1910 was based entirely on increased cost of living.—(*Employes' Witness Karn, pp. 6923; Employees' Ex. 9, p. 2; Employees' Witness Carter, p. 736.*)

Higher rates of wages in effect on some Western Railroads than requested in Proposition.—(*Employes' Ex. 3, pp. 17-38.*)

(3) The graduated rates of wages of Engineers and Firemen requested in this Proposition were determined by a desire to be fair to the Railroads and yet have proper regard for the rights of Engineers and Firemen.

(a) While the proposed rates of wages are advanced higher as the engines increase in weight, the increased earning capacity of the Engineer and Fireman is so much greater on the larger engines that the effect of the increased rates is not perceptible in the net earnings of the Railroads.

(b) The wage cost to the Railroads of Engineers and Firemen per ton mile greatly decreases as the weight of the engine increases, notwithstanding the increase in wage cost per locomotive mile.

(4) A higher rate of wages should be paid Engineers and Firemen on Mallet Engines than on other engines.

(a) For the same Weight on Drivers greater responsibilities, labors and dangers confront Engineers and Firemen on Mallet Engines than on other engines.

(b) A Mallet Engine is, in fact, two engines coupled together in a manner that makes it possible for Railroads to operate them with one Engineer and Fireman, thus saving the expense of one engine crew.

Actual percentage of increase in rates requested, for each Railroad, and for each weight on drivers.—(*Employes' Ex.* 4.)

Wage cost decreases as weight of engines increased.—(*Employes' Ex.* 51, p. 22.)

Two engines converted into a single Mallet.—(*Employes' Ex.* 51, p. 1.)

Mallet is practically two engines.—(*Member of Board of Arbitration, Mr. W. L. Park, p.* 2936; *Employes' Ex.* 3, pp. 14-15.)

(5) The present differential of 15 cents less per day for Firemen on oil-burning locomotives should be eliminated, and the rates requested herein should be awarded on all locomotives.

(a) In other industries differential in wages per day have not been established, and lower wages have not been paid because of the introduction of devices that reduce physical labor.

(b) Where oil has been substituted for coal as a fuel, marine and stationary firemen have suffered no loss in wages per day and no differential has been established between their rates of wages.

(c) When steam steering apparatus was installed on ships no reduction of wages was suffered by the helmsmen, and no differential was established.

(d) When hod carriers were relieved of climbing ladders with brick, by the introduction of hoisting engines, employers in the building trades did not enforce a reduction of wages or insist on a differential in the wages of hod carriers where hoisting engines were installed.

(e) When blacksmiths' helpers were relieved of swinging heavy hammers, by the introduction of steam or pneumatic hammers, their wages were not reduced and no differential was established.

(f) Instead of wage reductions there have been repeated wage increases in practically all industries where physical labors of working men have been relieved by the introduction of labor-saving devices.

(g) If employes are not permitted to participate in the returns from the introduction of labor-saving devices and processes, industrial invention and progress will result in lack of economic advancement and in the degradation of wage-earners.

(6) A graduated wage for Firemen, by Weight on Drivers or size of engines, where oil is used as fuel has never been insisted upon for Firemen, and it has been a well-recognized principle that the ability of the employe to produce earnings for his employer is a fair basis for the graduation of wage rates.

(a) During past wage negotiations Railroads have not proposed a change from the practice of graduating Firemen's rates of wages on oil-burning engines in the same manner as on coal-burning engines.

(b) That the rates of wages are graduated in other industries in accordance with the importance of the work and the earnings for employers is observed in the practice of paying captains, mates and engineers on ships a higher rate as the tonnage of the vessel increases; is exemplified in the graduated Rates of wages of motor truck drivers in proportion to the capacity of the truck and the increased earnings for the employer; is the rule with professional men, who graduate their fee in accordance with the importance of the case.

(c) In the leading industries rates of wages of skilled workers are usually based upon their relative contributions to the unit of output, and is the principle generally recognized as a proper basis of wage payments. This is also the underlying principle of bonus systems of wage payments and the so-called systems of efficient management. It is conceded that Engineers and Firemen should produce the maximum output, within the proper limitation of physical welfare, and having so exerted themselves should be permitted by the Railroads to participate in the results of their efficiency. This participation is, to some extent, realized by the adoption of weight on drivers of locomotives as a basis of wage rates.

Differential between oil and coal very unjust to Firemen.—(*Employes' Witness Karn*, p. 6923.)

1910 Arbitration Board established a lower rate on oil-burners and thereby established a precedent that had never been insisted upon by the Railroads themselves.—(*Employes' Witness Karn*, p. 6928.)

Differential in wages not established in other industries because of introduction of labor-reducing devices.—(*Employes' Witness Karn*, pp. 6929-6933, 6966-67.)

Ability of employe to produce earnings for his employer a fair basis for the graduation of wage rates.—(*Employes' Witness Karn*, p. 6999-7000.)

Captains, mates and engineers on ships paid higher rate as tonnage of vessel increases.—(*Employes' Witness Karn*, p. 6934.)

Owing to the increased output of the machine-mined product, those working with the machines can earn more than those working by the hand process, although the former possess much less skill and training than the latter. The large economy with the machine method makes it possible to pay much higher wages with increased profit to capital and without reducing the price of the product. The Mine Workers' Union, by their insistence that the net earnings of the machine miner be higher than the hand miner, have thus prevented a reduction of the wages of the hand miners whose product must compete with the machine product.—(*United States Bureau of Labor, Bulletin No. 67, November, 1906, p. 730.*)

The increased productivity of the new process makes possible * * * the payment of a relatively higher scale of wages than formerly, especially when the new process is introduced gradually and the old process competes with it. The effect of such competition between the product of machine and hand workers is well exemplified in the glass industry. Despite the elimination of the skilled hand worker in some branches of the glass industry by the introduction of machinery, no general reduction of wages has resulted. In 1900 it was stated authoritatively (*National Glass Budget, June 9, 1900, p. 1*) that the machine operators in the manufacture of lamp chimneys were earning 50 per cent more than the hand workers, averaging \$6.00 per day.—(*United States Bureau of Labor, Bulletin No. 67, November, 1906, p. 729.*)

Article 2—Pusher, Helper, Mine Runs, Work, Wreck, Belt Line, Transfer, and All Other Unclassified Service.

Engineers and Firemen on Locomotives in pusher and helper service, mine runs, work, wreck, belt line and transfer service, and all other unclassified service, will be paid through freight rate according to the class of engine.

It is contended that the foregoing rule should be awarded, because—

(1) A standardization of rates of wages of Engineers and Firemen is impracticable if an attempt is made to fix a different rate for each and every class of service.

(2) In past schedule negotiations where differentials in rates have developed in the several classes of road service it has been the result of compromise, the Railroads conceding as little as possible and the representatives of the Engineers and Firemen accepting what was offered, rather than take action that would result in an interruption of railway business.

(3) Practically all Railroads now pay through freight rates on all or some of the classes of service included in this rule.

Many Railroads now pay Through Freight rates for the service mentioned in this rule.—(*Employes' Witness Moore, p. 112; Employes' Witness Skog, p. 788; Employes' Witness Cadle, pp. 61-65; Employes' Ex. 87, pp. 10-12; Railroads' Witness Trenholm, pp. 5096, 5575-5576; Railroads' Ex. 1, pp. 25-42.*)

Article 2—Differential on Divisions where grade is 1.8%.

On all divisions where grade is one and eight-tenths per cent or over, an increase of ten per cent over Valley rates will be paid.

It is contended that the foregoing rule should be awarded, because—

- (1) The hazard of the occupation is greater on mountain grades.
- (2) The responsibilities and difficulties of controlling trains are greater on mountain grades.
- (3) Without a differential, or a higher rate on mountain grades, earnings of Engineers and Firemen are usually less than on valley divisions.
- (4) Usually Railroads receive greater revenue per ton mile and per passenger mile in mountain territory.

Hazard and responsibilities in connection with operation of trains on mountain grades greatly increased.—(*Employes' Witness Westbrook*, pp. 1256, 1268-1269; *Employes' Witness Jones*, pp. 866-869; *Employes' Witness Armstrong*, pp. 1076-1077.)

I think on these particular mountain districts, the men should have more money for the conditions are such that they cannot earn the money that a valley man can make. We make hours while they make miles.—(*Employes' Witness Jones*, p. 901.)

Pay in Mountain Service not sufficient.—(*Employes' Witness Armstrong*, p. 1094.)

Certain Railroads already pay increased rate on mountain districts.—(*Employes' Witness Armstrong*, pp 1078-79; *Employes' Witness Cadle*, pp. 65-66; *Employes' Witness Moore*, pp. 113-114; *Railroads' Witness Trenholm*, pp. 5577-5578.)

Article 2—Narrow Gauge Locomotives.

On roads where narrow gauge locomotives are in service, a five per cent increase over present rates in effect shall be granted.

It is contended that the foregoing rule should be awarded, because—

- (1) The peculiarities of the service have resulted in higher rates of wages for Engineers and Firemen being established in past wage negotiations on Narrow Gauge Railroads than on Standard Gauge Railroads for the same weight on drivers, and, hence, a five per cent

increase in wages should now be awarded account of the increased cost of living, if for no other reason.

Peculiarities of Narrow Gauge Service and rates resulting therefrom.
—(*Employes' Witness Crylie*, pp. 1649-1678.)

Seven Railroads participating in this Arbitration have Narrow Gauge Service.—(*Railroads' Ex. 1*, pp. 155-156.)

Article 2—Electric Locomotives, Electric Either Multiple Unit or Single, Gasoline or Other Service.

Wherever electric, multiple unit, gasoline or other service is installed as a substitute for steam, or is now in operation on any Railroad parties to this agreement or on any of the tracks operated or controlled by any of them as part of their system, the Locomotive Engineers and Firemen shall have the right to the position of Motorman and Helper, respectively. The term "helper" will be understood to mean the second man employed on electric locomotives or other power.

Seniority rights to be interchangeable. Steam rules, hours of service and mileage to apply with the following rates of pay:

Passenger Service.	Motorman	Helper
20,000 lbs. tractive power and less	\$4.50	\$3.35
Over 20,000 lbs. tractive power and less than 25,000 lbs..	4.60	3.35
Over 25,000 lbs. tractive power and less than 30,000 lbs..	4.70	3.35
Over 30,000 lbs. tractive power and less than 35,000 lbs..	4.80	3.35
Over 35,000 lbs. tractive power and less than 40,000 lbs..	4.90	3.35
Over 40,000 lbs. tractive power and less than 45,000 lbs..	5.00	3.35
Over 45,000 lbs. tractive power and less than 50,000 lbs..	5.15	3.35
Over 50,000 lbs. tractive power and less than 55,000 lbs..	5.35	3.35
Over 55,000 lbs. tractive power and less than 60,000 lbs..	5.50	3.35
Over 60,000 lbs. tractive power and over.....	5.60	3.35
All other Service except Passenger and Switching.	Motorman	Helper
20,000 lbs. tractive power and less	\$5.00	\$3.75
Over 20,000 lbs. tractive power and less than 25,000 lbs..	5.20	3.75
Over 25,000 lbs. tractive power and less than 30,000 lbs..	5.30	3.75
Over 30,000 lbs. tractive power and less than 35,000 lbs..	5.40	3.75
Over 35,000 lbs. tractive power and less than 40,000 lbs..	5.60	3.75
Over 40,000 lbs. tractive power and less than 45,000 lbs..	5.80	3.75
Over 45,000 lbs. tractive power and less than 50,000 lbs..	6.00	3.75
Over 50,000 lbs. tractive power and less than 55,000 lbs..	6.20	3.75
Over 55,000 lbs. tractive power and less than 60,000 lbs..	6.40	3.75
Over 60,000 lbs. tractive power and less than 65,000 lbs..	6.60	3.75
Over 65,000 lbs. tractive power and less than 70,000 lbs..	6.80	3.75
Over 70,000 lbs. tractive power and over.....	7.00	3.75
Switching Service.	Motorman	Helper
20,000 lbs. tractive power and less	\$4.75	\$3.10
Over 20,000 lbs. tractive power and less than 40,000 lbs..	5.00	3.10
Over 40,000 lbs. tractive power and less than 60,000 lbs..	5.50	3.10
Over 60,000 lbs. tractive power.....	6.00	3.10

It is contended that the foregoing rule should be awarded, because—

(1) The electric question is an economic question; a question as to what is to become of steam railroad employes as electric locomotives

are substituted for steam locomotives; a question as to permitting the genius of the inventor and the avarice of the employer depressing the American standard of living instead of adding to the economic welfare of the Engineers and Firemen, as should result from the substitution of electric for steam power. Employes should be privileged to share in the productivity and economic advantage resulting from the introduction of labor-saving and profit-producing machines that can be operated at a comparatively low cost.

(2) As wonderful printing inventions have brought to the employer prosperity, to the masses of the people cheaper books and newspapers, and to the employes in the printing trades better wages and improved conditions, the Engineers and Firemen should also share with the Railroad employer and the public the profits and benefits arising out of the introduction of electric locomotives.

(3) The Engineers and Helpers have just as great responsibilities, and must possess the same knowledge of train rules and operation as in steam service.

(4) The Railroads should not deprive their Engineers and Firemen of the right to employment in electric service they now possess in steam service.

(5) Only experienced Engineers and Firemen should be permitted to operate trains propelled by electric locomotives. As a chain is no stronger than its weakest link, an inexperienced Engineer in charge of an electric locomotive may cause disaster to himself and others, although every other Engineer in the same service and on the same track may be thoroughly competent.

(6) The wage cost per ton mile to the Railroads of Engineers and Firemen employed on electric locomotives and electric trains is much less than with steam locomotives at the same wage rate per day.

If we take the most favorable points for each type of locomotive, with reference to actual service capacity, the Consolidation is seen to be at its best at about 11 M. P. H. and can then move about 4,400 ton-miles per hour. The Mallet is at its best at about 13 M. P. H., and at that speed is capable of moving 6,100 ton-miles per hour. And the electric locomotive is at its best at about 20 M. P. H., when it can handle about 22,000 ton-miles per hour. At the maximum point the Mallet can therefore haul about 39 per cent more than the Consolidation, and the maximum service capacity of the electric is five times as great as that of the Consolidation and 3.6 times that of the Mallet.

The explanation of this tremendous increase lies, of course, in the fact that the electric locomotive cannot only haul a greater tonnage than the Mallet or the Consolidation, but it can haul this greater tonnage at a much higher speed.—(*C. L. DeMault, M. Am. Soc. C. E., Professor of Electrical Engineering, University of Michigan—Employes' Ex. 54, pp. 22-23.*)

The electric locomotive has many economical advantages, some of which are:

1. Due to the lack of smoke and gases maintenance charges on bridges, steel work, etc., are decreased.

2. There is a fuel saving on account of no standing charges against the electric locomotive; power is only used when hauling trains and no power is required when coasting and laying over; cheaper grade of fuel can be burned at the central power house and handled at less cost and at a higher efficiency.

3. Does away with turntables and decreasing shunting movements, as an electric locomotive is operated equally well from either end. Much time is thus saved, resulting in increased capacity of the terminals.

4. Water stations, round houses, etc., eliminated.

5. The cleanliness is a comfort to the passengers, resulting in increased travel.—(*Employes' Ex. 54, p. 21.*)

Tonnage doubled by use of electricity.—(*Employes' Witness Finn, pp. 1230-1231.*)

The operation of steam Railroads by electricity is no longer in the experimental stage. Electricity as a means of motive power has been tried out very extensively and has proved to the world that it is more reliable than steam and has many advantages over it.—(*Railway and Locomotive Engineering—Employes' Ex. 54, p. 20.*)

As much skill required to operate electric as steam locomotives, and employes are required to pass same examinations.—(*Employes' Witness Finn, p. 1227.*)

Responsibility as great in electric service as in steam service.—(*Railroads' Witness Hewitt, pp. 4481-4482.*)

No reason why Engineers and Firemen should not fill positions in motor and electric service.—(*Railroads' Witness Trenholm, pp. 5579-5580.*)

Helpers should be employed on electric locomotives as a matter of safety, if for no other reason.—(*Railroads' Witness Hewitt, p. 4461.*)

Dangers connected with the operation of trains by electricity.—(*Employes' Witness Merriman, pp. 2831-2853; Employes' Ex. Nos. 48, 49.*)

Decrease of thirty-two per cent in wage cost to Railroads of Engineers and Firemen by reason of substitution of electricity for steam.—(*J. B. Cox in Railway Age Gazette—Employes' Ex. 54, p. 7.*)

Operating expenses reduced about fifty per cent, by adoption of electricity.—(*Railway and Locomotive Engineering—Employes' Exhibit 54, p. 1.*)

Article 3—Local or Way Freight Service.

Local trains are way freight or mixed trains whose work is the loading or unloading of freight or doing station switching en route.

Engineers and Firemen on such trains will be paid ten per cent increase over through freight rates.

Through or irregular freight trains doing work such as loading or unloading freight, stock or company material, switching at stations, spurs, mines, mills, or required to pick up or set out cars, unless cars to be picked up are first out, or cars to be set out are switched together at terminals, or doing any other similar work, shall be paid for same at overtime rates in addition to time or mileage made on the trip.

It is contended that the foregoing rule should be awarded, because—

(1) The station switching and other work peculiar to Local Freight Service results in a decrease in the average speed of such trains between terminals, thereby greatly decreasing the earnings of Engineers and Firemen for the same period of service. Through freight rates are based upon the theory that, under favorable conditions, Engineers and Firemen may earn in that service the premium or bonus that is paid when trains are transported at an average speed of more than 10 miles per hour. In Local Freight Service Engineers and Firemen seldom are paid on the mileage basis.

(2) The definition of Local Freight Service, made a part of this rule, is necessary if evasion of the award is to be avoided.

(a) A clear and comprehensible definition of when and where and under what conditions wage increases are to apply is essential if their purpose is not to be defeated by methods of application. Some Railroads contend they do not operate Local Freight trains, and base their contention on the fact that on such Railroads Local Freight trains are known under some other name.

(b) To avoid the higher rates of wages per mile paid to Engineers and Firemen in Local Freight Service such trains may often be abandoned and Through Freight Engineers and Firemen required to perform Local Freight work for the lower rates of wages; or to avoid tying up Local Freight trains in the application of the Federal Hours of Service Law, it is not unusual to assign much of the work of Local Freight trains to Through Freight trains, thus reducing expense of operation to the Railroads and increasing the labors and hours on duty of the Engineers and Firemen in Through Freight Service, without the Local Freight compensation. When this work is required of Engineers and Firemen in Through Freight Service additional compensation should be paid.

The Way-Freight Trains, of course, there are times when trains are on the road over fifteen hours. That can scarcely be avoided. * * * —(Mr. H. D. Judson, General Superintendent, C., B. & Q. R. R. (1906)—*Employes' Ex.* 88, p. 7.)

Earnings of Engineers and Firemen are much less per hour in Local Freight Service than in Through Freight Service.—(*Employes' Ex.* 85, pp. 8-15; *Employes' Witness Steinberger*, p. 7168; *Employes' Ex.* 89, p. 40, etc.; *Employes' Witness Livesay*, p. 1778.)

I think, Mr. Chairman, that a freight train going out and doing the work of a way freight train, unloading merchandise and doing the local switching through the country, yes, that he is entitled to the pay. It is a question of degree; how much does he do of it? If you start a train out, the mere fact that you started out as a through train and then used it from station to station to do this work and make practically a way-freight out of it, you should pay the local differential.—(*Railroads' Witness Trenholm*, pp. 5746-5747.)

Western Railroads now pay Conductors and Brakemen more than ten per cent differential in Way-Freight Service.—(*Employes' Witness Steinberger*, pp. 7169-7170; *Employes' Ex.* 85, p. 16.)

No question as to what constitutes a Way Freight under the following rule in effect on Union Pacific Railroad: "Local or Way Freight trains: Trains loading or unloading way freight or doing station switching, are Way Freight trains."—(*Railroads' Witness Trenholm*, p. 5604.)

Article 4—Switching Service.

	Engineers	Firemen
Engines weighing less than 140,000 lbs. on drivers...	\$4.75	\$3.10
Engines weighing 140,000 lbs. and over on drivers....	5.00	3.25
Mallet type engines.....	6.00	4.00

Engineers and Firemen required to begin service other than between the hours of 6 A. M. and 8 A. M., will be paid 2 cents per hour, in addition to above rate.

Ten hours or less will constitute a day's work in switching service. Time to be computed continuously, all over ten hours to be computed and paid for at the rate of time and one-half. All overtime to be computed on minute basis.

Switch Engineers and Firemen will not be required to work longer than six consecutive hours without being allowed thirty minutes undisturbed for meals.

When Road Engines are used in yard service, road rates will apply.

It is contended that the foregoing rule should be awarded, because—

(1) The fact that Engineers and Firemen in Switching Service have never possessed the numerical strength to effectively bargain for rates of wages commensurate with their responsibilities and duties has resulted a lower rate of compensation per hour for them than for em-

ployes of similar importance in any other industry. The rates of wages per hour requested in this rule for Engineers are less than wages paid by employers in many other industries for skilled workmen. The rates of wages requested for Firemen are less than Road Carriers and Building Laborers are paid. Engineers and Firemen are forced to work from ten to fourteen and often sixteen hours in a single day. The Railroads have presented evidence that clearly establishes the fact that some Engineers and Firemen in Switching Service were required to work an average of 14 hours per day. It should be remembered by the Board that with the extension of yards in congested districts the safety of the passenger train to a very great extent devolves upon the faithfulness, alertness and skill of the Engineers and Firemen in Switching Service. Because of the assertion of their wage-bargaining power other employes of Railroads in Switching Service have made far greater advance in wage rates than have Engineers and Firemen.

(2) If the percentage of increase in rates of wages requested for Engineers and Firemen in Switching Service exceeds the percentage in requests for other service, it is because the present rates are so low, and not because the requested rates are excessive.

(3) Rates of wages of Engineers and Firemen in Switching Service are lower, proportionately, than wages of other employes in the same service.

(4) The higher rates requested on the larger engines in Switching Service are equitable, because—

(a) The larger engines are maintained where the heaviest work is required of Engineers and Firemen. The smaller engines are usually in service at the less important switching yards or assignments. Thus, the theory of increased rates of wages for increased responsibility and labors and increased productive efficiency is maintained for Switching Service in this Proposition.

(b) Some Railroads have insisted on paying a lower rate of wages to Engineers and Firemen in what has been designated as "second class" yard, upon the theory that the work is not so arduous. By the gradation of rates of wages by weights on drivers, as in this rule, Railroads are privileged to pay a lower rate where work is less important by the assignment of a small engine to such work.

Committees unable to get higher rates in all yards.—(*Employes' Witness Carter*, p. 588.)

Rates of wages per hour requested for Engineers are less than wages paid employes in many other industries.—(*Employes' Ex. 5, pp. 12-13, etc.*)

Rates of wages per hour requested for Firemen are less than wages paid hod carriers and building laborers.—(*Employes' Ex. 5, pp. 12-13, etc.*)

The only reason that Switch Enginemen do not insist that they be relieved at the end of eight hours is because their rate is so low that they cannot make a living.—(*Witness Carter, p. 587.*)

Engineers and Firemen in Switching Service deprived of family associations by long period of daily employment. In order to give a day's service, up at about 4:30 or 5 o'clock in the morning, to get down to engine and be there not later than 6:30, and working then from 6:30 a. m. until, possibly, 8:15 p. m. before finally relieved. * * * As a rule, a good many of them work that number of hours. * * * It would be 9:30 p. m. before he could get home to his family. * * * It is a very common occurrence for Engineers to work 13 hours a day.—(*Employes' Witness Burns, pp. 817-819.*)

The theory of increased rates of wages for increased responsibility, and labors and increased productivity is maintained for Switching Service.—(*Employes' Witness Carter, pp. 589-590.*)

I think the tendency, when buying engines, is to buy a heavier switch engine than formerly. That is brought about fully as much by the increased capacity of your cars as it is by any increase in the size of your road engines. We have gone in the last few years, ten or fifteen, possibly, to just as big an increase in our cars over what we had, as we have in the engines, in road service.—(*Railroads' Witness Trenholm, pp. 5607-5608.*)

Smaller engines used in "second class" yards take lower rate, according to weight on drivers.—(*Employes' Witness Carter, p. 590.*)

(5) The request that an additional two cents per hour be paid for night work in Switching Service is justified.

(a) The extra hazard to which Engineers and Firemen are exposed; the hazard of loss of employment by penalties imposed by Railroads for accidents which occur with greater frequency at night, and the hazard of personal injury received in such accidents demands a higher night rate. Ordinarily a switching crew consists of five men and the Railroads and other Boards of Arbitration have already recognized that three members of this crew should receive a higher rate for night work. The other two members of the switching crew, the Engineer and Fireman, are entitled to as much consideration.

Switching Service more hazardous at night should pay higher rate.—(*Employes' Witness Skog, pp. 788-790, etc.*)

Mr. Nagel: Well, give a case in which an Engineer or Fireman has his choice the year round, would he take the day or night service?

Mr. Trenholm: Oh, I think the day service would be his choice the year round.

Mr. Nagel: Well, it may be assumed that this is predicated upon some reason.

Mr. Trenholm: Oh, yes; I have got to admit that I would rather work days than nights, myself, on any job. I have had them both. I have got to concede that.—(*Railroads' Witness Trenholm*, p. 5194.)

Mr. Carter: * * * Don't you pay switchmen and switch foremen a higher rate at night?

Mr. Higgins: I think we pay two cents higher.

Mr. Carter: And don't you pay Hostlers a higher rate at night?

Mr. Higgins: Yes. * * *—(*Railroads' Witness Higgins*, p. 4833.)

It has been the rule to pay yard foremen and yard switchmen, or yard helpers, a differential of two cents for night work, over day work.—(*Railroads' Witness Trenholm*, p. 5192.)

Mr. Carter: Now, we find, going back to and including Frew, there were forty-four cases of blindness on that page and the last page of the table, and I find that four, or 10 per cent, were due to the fact that Engineers or Firemen are unable to see obstructions at night in yards—four is not quite 10 per cent of forty-four. In this Arbitration, Engineers and Firemen are asking for a rate of two cents an hour higher while switching at nights than while switching in days. Does not your table set forth the extra hazard of switching at night?

Dr. Cory: I don't know that the table sets it forth, but my personal recollection, from handling the disabilities in the field, would lead me to believe that the differential asked is not excessive at all.

Mr. Carter: There are four actual cases due to obstructions not seen at night?

Dr. Cory: Yes, sir.

Mr. Carter: In switching service?

Dr. Cory: Yes, sir.

Mr. Carter: Four is not quite 10 per cent of forty-four.

Dr. Cory: About one-eleventh.—(*Employes' Witness Cory*, pp. 2702-2703; *Employes' Ex.* 45, pp. 43-44.)

(6) No Engineer or Fireman should be required to work more than ten hours of each twenty-four hours in Switching Service.

(a) If railroads find it profitable to require Engineers and Firemen to work more than ten hours, Railroads should pay the usual overtime rate of "time-and-one-half."

(b) Contention of Railroads that Engineers and Firemen in Switching Service cannot profitably be relieved from duty at the expiration of ten hours is in keeping with the opposition of employers to any amelioration of conditions under which employes labor; and, should their contention be well founded in some instances, no better evidence could be presented that the rates and overtime rate requested are not excessive, for an employment so arduous and exacting. It is not conceded that Engineers and Firemen in Switching Service cannot be relieved from duty at the expiration of ten hours, and contentions to the contrary are prompted by pecuniary interests. If the exigencies of Railroad

business demand that the Railroads be privileged to retain a lien upon the time that is required by the employe for rest and recreation, then the employe should be compensated at a higher rate, not only because he is required to sacrifice rest and recreation, but is compelled to forego the pleasures of home comfort and association with family.

(c) Payment for overtime at rates higher than rates for the usual hours of employment is a well-established practice in all leading industries except by the Railroads, to employes in conducting transportation. To shop employes of Railroads time-and-one-half is paid for overtime, which is a recognition by Railroads of the correctness of the principle.

(7) The unfairness of the attitude of Railroads in their opposition to the payment of overtime rates to Engineers and Firemen is found in testimony and other evidence presented by the Railroads that certain Engineers and Firemen have been paid abnormally high wages over stated periods of time. It has been shown by the Railroads in this Arbitration that certain Engineers and Firemen have earned practically two men's wages by performing two men's work; that by working practically sixteen hours a day earnings have been abnormally high. All employers have usually found methods of avoiding the payment of overtime when the overtime rate is time-and-one-half or double-time, as in most industries.

(8) That Engineers and Firemen should not be required to work longer than six consecutive hours without being allowed thirty minutes undisturbed for meals is a request found in this rule, and it is our opinion this should be awarded.

Mr. Stone: During that dinner hour do you turn your engines into the roundhouse or does a Hostler take charge and you go and get a warm meal, or are you released wherever you happen to be?

Mr. Skog: Relieved where we are when 12 o'clock comes, without going to dinner.

Mr. Stone: Are you released from responsibility for the engine?

Mr. Skog: There was an order issued at one time, that the company would release us from all responsibility, still we cannot go anywhere because we have got to be right on that engine anyhow. We all carry lunches because we do not know where we are going to get our dinner.

Mr. Stone: You are just as liable to be caught at one point of the yard today, and, tomorrow, somewhere else?

Mr. Skog: Yes.—(*Employes' Witness Skog, pp. 806-807.*)

Mr. Stone: During that meal hour are you relieved from the care and responsibility of the engine?

Mr. Burns: No, sir.

Mr. Stone: You are not?

Mr. Burns: No, sir.

Mr. Stone: You cannot turn your engine in somewhere to a Hostler or to a roundhouse and go and get a warm meal?

Mr. Burns: No, sir.

Mr. Stone: You have to eat a cold lunch?

Mr. Burns: Have to eat a cold lunch, yes, sir.—(*Employes' Witness Burns, p. 821.*)

Time and one-half paid for overtime to shop employes by Railroads.—(*Employes' Ex. 83, p. 7.*)

(9) Switching Service requires the constant efforts of Engineers and Firemen to observe and obey signals, and switching engines are usually designed with this requirement in view. Road engines are usually equipped with high tenders, over which nothing can be seen by the Engineer and Fireman. Road engines are usually difficult to reverse, and as in Switching Service Engineers are constantly reversing engines their labors as well as responsibilities are increased by the use of road engines for switching purposes.

I have known a great many men to get into trouble handling road engines, switching in a yard. The arrangements on the inside of the cab are not as convenient on a road engine as on a switch engine, because when you have got a regular switch engine, they make it as convenient as possible, so you can handle that engine and get the signals. With a road engine, some of them, they are not so convenient for doing switching service. Consequently the Railroads have always been willing to pay a differential when they did, and a great many of them have got that they pay a differential when they use road engines.—(*Employes' Witness Cadle, p. 81.*)

Mr. Stone: You consider it worth much more to run a road engine in yard service than an engine designed for that service, do you not?

Mr. Gannon: I certainly do, because of the inconvenience of it, and the way she is constructed, and the air, and it is hard to see signals, more so than it is in an engine especially designed for that class of work.

Mr. Sheean: Mr. Gannon, is it your judgment that in this transfer service in and about Chicago, that in the proper operation of it, they should use a road engine or a switch engine?

Mr. Gannon: I would prefer a switch engine.

Mr. Sheean: For transfer work?

Mr. Gannon: For any class of work.

Mr. Sheean: Speaking particularly of the transfer work that you have described here, you think that on that work, the engine best adapted for that transfer work is the switch engine?

Mr. Gannon: I think so, yes, sir.—(*Employes' Witness Gannon, pp. 1371-1372.*)

Article 5—Preparatory Time.

Engineers and Firemen in all classes of service will be allowed thirty minutes as preparatory time in addition to all other time or mileage made on the trip or day, at the pro rata rate corresponding with class of locomotive and service; provided, that on lines of Railroad where rules or

schedules require them to be on duty more than thirty minutes before time ordered to leave roundhouse or other point, they will be allowed one hour's time, and when required to be on duty more than one hour, actual time will be allowed. Preparatory time will be the time Engineers and Firemen are required to be on their locomotives, prior to time ordered to leave roundhouse or other point.

It is contended that the foregoing rule should be awarded, because—

(1) The preparation of a locomotive for service is an essential feature of the duties of both Engineers and Firemen.

(a) An Engineer is required to inspect a locomotive and assume responsibility for all undiscovered defects; to attend and adjust all lubricating attachments and assume responsibility for their perfect working; to inspect and assume responsibility for the perfect working of air brakes and other mechanical devices that make up important adjuncts to the operation of a modern locomotive; to inspect train registers for the purpose of ascertaining the arrival and departure of trains that in any manner affect the safe operation of the train he is to pull; to inspect bulletin boards for the purpose of observing rules and orders posted for his guidance since his last trip; to compare his watch with the official time piece of the Railroad by which he is employed. After all of these duties have been performed he is ready to receive his running orders and begin the work for which Railroads are willing to pay.

(b) A Fireman is required to assist the Engineer in such duties as may be assigned him; to assume his portion of responsibility for inspection of bulletins, correct time of his watch, etc.; to inspect and assume responsibility for the presence on the engine of proper tools, supplies, coal, oil, water, signal devices, etc., and if not on the engine to secure them; to inspect fire box and prepare fire for the trip; to inspect ash pan and assume responsibility for its condition. After all of these duties have been performed he is ready to begin the work for which Railroads in the past have been willing to pay.

(2) This Preparatory Time should be paid for in addition to all other time or mileage made on the trip or day, because—

(a) If not paid for "arbitrarily," or distinct from other service, a premium will be placed on Railroads not requiring so important a service to be performed, or Engineers and Firemen may not be given sufficient time to properly perform preparatory work, without being relieved of the responsibility for same. This

being a separate and distinct service, a safe and successful trip must depend on its faithful performance, and it is unfair that Railroads should decline to compensate Engineers and Firemen therefor.

(b) If for no other reason than their own personal safety Engineers and Firemen should prepare the engine they operate.

(c) The safety of the traveling public and other employes of Railroads is conserved by placing the responsibility for inspection and preparation of engines for service upon the Engineer and Fireman that operate that engine.

Fifty minutes consumed in preparing engine for trip; inspecting engine; seeing that tools and all supplies are on, including signal appliances; making out report as to proper condition before turning engine out of roundhouse and taking water, oiling engine, testing brakes, examining train register, etc., for which no compensation is allowed.—(*Employes' Witness Jones*, pp. 865-866.)

Required to serve practically one hour in preparing engine, etc., without pay.—(*Employes' Witness Hintz*, pp. 6807-6808.)

Thirty to forty-five minutes required to prepare engine for trip.—(*Railroads' Witness Trenholm*, pp. 5026, 5145.)

Necessity for provision covering Preparatory Time.—(*Employes' Witness Carter*, p. 537.)

Mr. Sheean: As a necessary and proper part of the work of running an engine on the road, the seeing that supplies are on the engine, the seeing that the air works, the seeing that the injector works, and the knowledge that your engine is in good condition, is a necessary and proper part of the Engineer's day's work, isn't it?

Mr. Jones: For the protection of the company, the public and the Engineers, it is, and I think we should be paid for that inspection.—(*Employes' Witness Jones*, p. 889.)

Service Whether Preliminary or Supplemental to Regular Duties Is to Be Computed on the Period "On Duty."

U. S. v. Illinois Central R. Co., 180 Fed., 630. District Court, Northern District of Iowa, June 23, 1910.

The question here is as to the effect of the rule of the company requiring men to report thirty minutes before the leaving time of the train to do the things required by the rule, coupled with the fact that this man did comply with that rule.

I do not think the custom of the company not to strictly enforce the rule makes any difference. This man complied with the rule. He arrived at the engine thirty minutes before the leaving time of the train, and was actually engaged in doing the things required by the rule, and the question here is whether he was, during that time, within the meaning of the Act, actually engaged in or connected with the moving of that train. That is the question here. In my opinion this man was on duty, within the meaning of the Act, from the time he went there and commenced to supervise, or overlook, that engine in preparation for the trip. It does not make any difference whether he was paid for this

time or not; that was the time his work and the strain on him began. The work of an Engineer, an employe of the Railroad, begins when under the rule of the company he is there and is at work in connection with the preparation of the engine for the moving of the train. He must look over that engine. He must see that it is oiled up. He must see that the air brakes are all right. He must move the engine down over the tracks and across the switches to connect it with the train. And, in my opinion, he is on duty, within the meaning of the Act, during the time he is doing these things. If he goes there a half an hour before the time to start to do these things, during the time he is there doing them he is on duty. That is my view of it.—(*Morris, D. J.*, pp. 630-631; pp. 126-127—*Employes' Ex.* 88, p. 21.)

Article 6—Terminal Delay.

Initial terminal delay for Engineers and Firemen in passenger service shall begin at the time they are called to leave roundhouse or other point and shall end upon departure of trains from passenger depot.

Final terminal delay for Engineers and Firemen in passenger service shall begin at the time they arrive at passenger depot, and will end when relieved from duty.

Initial terminal delay in freight service shall begin at the time Engineer and Fireman are called to leave roundhouse or other point and shall end when train has passed from yard track or lead to main line, and actually departs from the terminal.

Final terminal delay in freight service shall begin when train arrives at switch leading from main line into yard, and shall end when Engineer and Fireman are relieved from duty; provided, that if from any cause trains are held out of yard, final terminal delay shall begin.

Engineers and Firemen shall be paid on a minute basis for all terminal delay; at the pro rata rate for the class of engine used; this in addition to all time or mileage made on the trip.

It is contended that the foregoing rule should be awarded, because—

(1) For the purpose of preventing Railroads requiring Engineers and Firemen to report for duty before their services are needed this rule has been requested.

(a) The rule is intended to be a penalty imposed upon Railroads that permit their Engineers and Firemen to be called for duty and then detained in the terminal, or that permit Engineers and Firemen to be detained after they have completed a road trip.

(b) The burdensome duties of Engineers and Firemen, and the long hours of employment should guarantee them complete rest when not required for service.

(2) The payment for Terminal Delay on the Minute Basis is most equitable to the Railroads and to the Engineers and Firemen, as the men receive pay for only the actual time delayed and the Railroads are not required to pay for more time than actually delayed.

(3) Payment for Terminal Delay should be in addition to all time or mileage made on trip.

(a) Unless the payment is "arbitrary," or independent of payment for road service, there will be no incentive for Railroads to abandon the practice of detaining Engineers and Firemen at terminals when the road trip can be, or has been, made at a speed that would avoid overtime. If by earnest efforts an Engineer and Fireman have succeeded in transporting a freight train in less than ten hours, for which they have received pay for one hundred miles, the Railroad should not be permitted to detain them, because it could be done without incurring the expense of overtime.

I have been called to leave at 6 o'clock in the morning myself when I did not get out until 9. That is what I call terminal delay. * * * When the Railroad Companies did not pay for it and the caller happened to be up at Cadle's, say, an hour or two before leaving time, he would call Cadle and I would get down on the engine with my boots on and wait until they got ready for me. After they commenced paying me for it, then they checked it up. They did away with a whole lot of it. We got our rest in bed instead of on the engine. I think we were better equipped to go out and do a day's work for the company.—(*Employees' Witness Cadle, pp. 83-84.*)

Men were called to go out at a certain hour in the morning, 7 o'clock, 8 o'clock, the congested condition of the yard was such that they could not get the train made up, could not get ready. Men were kept waiting. It was an abuse that at that time, I think, needed a remedy, and the men were very pressing, very urgent in applying some remedy. They came in with their schedules, discussed these things, claimed that if the Railroads had to pay them, if they had to pay these men for three hours for sitting on an engine when they should be home resting, that they would soon stop it. And they made the same claim as to getting out on their starting time. They would not call men and have them come down and sit around an hour or two hours.

Now, the pressure was so great on the local officials of the roads, the operating officers, that they had to concede that there was some justice in it, and while one road granted one thing and another granted another, it worked in that this was put in as a penalty for initial terminal delay and final terminal delay in addition to the road mileage, because if a man made a run of 100 miles, and did it in five hours or six hours, it was no penalty to the Railroad to keep him there four hours to make his hours equal his miles. So they had to have the penalty in addition to the road mileage or time, in order to make a penalty of it.

Now there is no question but what that has cured itself. Possibly there may be an occasional case of delay, and perhaps unnecessary delay.—(*Employees' Witness Trenholm, p. 5018.*)

At least one hour is consumed in the terminal.—(*Employees' Witness Martin, p. 1483.*)

Mr. Stone: Taking your 245 exhibit, it does show that the practice is almost universal.

Mr. Bremerman: Yes, in one form or another.

Mr. Stone: And the same is practically true of 246, on the terminal delay, is it not, in some form or other, in a large majority of the percentage of mileage?

Mr. Bremerman: 246 is for Firemen; 245 is for Engineers. They are both on terminal delay. They show practically the same thing, that in all except some three or four per cent, terminal delay provisions appear in the schedule.

Mr. Stone: Do I understand your figures correctly on page 246, that 70 per cent pay this separately from road trip for Firemen in the western territory?

Mr. Bremerman: Yes, initial terminal delay.

Mr. Stone: And the 73 per cent on page 245 would be paid to Engineers?

Mr. Bremerman: Yes, sir.

Mr. Stone: And final terminal delay for western territory, 57 per cent are paid separate from the road trip, on page 254?

Mr. Bremerman: 57 per cent, yes, Engineers' final terminal delay. Firemen, on page 246, 54 per cent final terminal delay.—(*Railroads' Witness Bremerman*, pp. 3296-3297; *Railroads' E.x. 1*, pp. 233-265.)

Engineers and Firemen in road service compelled to seek relief from the many abuses resulting from terminal delay.—(*Employees' Witness Cadle*, pp. 84-85.)

Mr. Sheean: This initial or terminal delay rule was designed for what?

Mr. Higgins: It was designed to correct conditions that the men could not control; it was remedial, wholly. The initial terminal delay rule was to correct bad calls, calling men from their homes too early, or earlier than was necessary; and the final terminal delay rule was to release men promptly after the completion of a trip.—(*Railroads' Witness Higgins*, p. 4684.)

Mr. Sheean: In the matter of final terminal delay, Mr. Higgins, have there been any changes since that time? I am anticipating a little, but have there been any changes on the Missouri Pacific as to the time of delay before overtime begins?

Mr. Higgins: I think it still remains at one hour for initial and thirty minutes for final.—(*Railroads' Witness Higgins*, p. 4685.)

Article 7—Automatic Release and Tie-Up.

Engineers and Firemen arriving at terminal or end of run are automatically released; when used again, they begin a new day.

Engineers and Firemen tied up between their terminals will be paid continuous time, no deductions will be made for time tied up.

It is contended that the foregoing rule should be awarded, because—

(1) So long as Railroads avail themselves of the low rates of wages peculiar to the mileage basis, they should not be permitted to deprive Engineers and Firemen of the premium or bonus feature of the mileage basis of wage payments.

(a) Since the beginning of wage bargaining between Railroads and Engineers and Firemen a low rate of wages per hour has been agreed upon because at that time trains were usually run at high speeds, and 100 miles for a day's pay could be made in much less than the hours constituting a "day." As a bonus to Engineers and Firemen who transported a train expeditiously no deductions were made in the day's pay because the full number of hours were not worked. With the gradual increase in number and weight of trains speed has been reduced to the extent that a majority of Engineers and Firemen now seldom profit by this bonus. The hours were fixed by a desire to meet the ordinary delays, such as hotboxes, delay at meeting points, but was never intended to permit Railroads to employ such time after arrival at terminal, or to secure additional services without compensating therefor.

(b) The mileage basis of wages being but an application of the piece-work system, like employes in other industries where the piece-work system is in effect, Engineers and Firemen have found that each "piece," or mile, is becoming more difficult to perform, with a consequent reduction in earning power, even though the rate per piece, or mile, has increased.

(c) The Automatic Release is essential if any semblance of bonus for fast work is to remain in practice. When an Engineer and Fireman reach a terminal they should be relieved from that day's work, and other men who have been at that terminal without work should be assigned to the next trip, and this has been the practice.

(d) Since this Arbitration has commenced some Railroads are deviating so far from past practice and the intent of existing wage agreements that Engineers and Firemen, after having transported a passenger train over a division of railway in the usual manner are then required to double back over the same division with a freight train and paid for mileage made in each service, as for one trip, because the division is less than 100 miles in length. The awarding of the Automatic Release feature of this rule is necessary if such abuse is not to become the practice.

(e) If Railroads desire to be relieved of the payment of a bonus for a fast trip or a short trip, they should be as liberal as other employers, and agree to a short work day, with time-and-one-half for overtime on week days and double-time for overtime on Sundays and other holidays. Until such time as Engineers

and Firemen work under such liberal conditions the Automatic Release should protect them from abuse.

(2) The Automatic Release is necessary if an equitable distribution of work between Engineers and Firemen is to be maintained.

(a) The first-in-first-out rule for the distribution of work has been in effect since the beginning of wage-bargaining on Railroads. By its application discrimination in the apportioning of work has been made impossible; by its application Engineers and Firemen have been relieved upon arrival at terminals, and the Engineer or Fireman longest out of work has been next assigned. To prevent the abrogation of these practices long in effect the rule should be awarded.

(b) When Engineers and Firemen are relieved from duty at other than home terminals the Automatic Release is necessary to avoid the injustice of doubling one engine crew out of such terminal while other engine crews may have been denied work but have incurred the expense of living away from home. Each Engineer and Fireman should retain his past privilege of taking his turn out of a distant terminal, and to insure this privilege the Automatic Release rule should be awarded.

(c) By new and strange interpretations of existing wage agreements some Railroads have recently attempted to exact additional work from Engineers and Firemen without compensating them for such work. To prevent a gradual development of such surreptitious method of wage-cutting this Automatic Release rule should be awarded.

(3) In a vast majority of tie-ups of Engineers and Firemen between terminals, in the application of the Federal Hours of Service Act, the cause is the overloading of the train.

(a) The overloading of freight trains is the most effective method of increasing revenues of Railroads, and, at the same time, reducing labor cost of product. That in the application of this pronounced feature of modern managerial efficiency, freight trains are occasionally tied-up, and Engineers and Firemen sorely inconvenienced, is a matter of such small concern that it has been accepted on some Railroads as one of the usual and expected incidents of Freight Service. We respectfully submit that Railroads should pay Engineers and Firemen continuous time from terminal to terminal in this revenue-producing operation.

(b) Relief from duty as required by the Hours of Service Law is essential, if safety measures are to be observed by Railroads, but when Railroads require Engineers and Firemen to perform service between terminals beyond the limitation of this sixteen-hour law, in order that Freight trains may produce a greater revenue, the expense of the tie-up should be borne by the Railroad instead of by the Engineer and Fireman, as has been the practice since the Federal law became effective.

(c) The deductions by the Railroads from the wages of Engineers and Firemen of pay for time tied-up under the law are, in fact, penalties imposed by the Railroads upon the Engineers and Firemen for failure to accomplish the impossible. As well may a driver deny food to his horse that has stalled on the hillside because of the overloading of his wagon. The one is as consistent and humane as the other, and we respectfully submit that the Award arising out of this Arbitration include the rule requested.

Rates of wages of Locomotive Engineers and Firemen in road service, being usually fixed upon a "piece-work" basis, at a certain rate "per hundred miles," it follows, that the higher the average speed of a train between terminals the greater the earnings in a given time.

When the mileage basis was adopted freight locomotives were not taxed to their utmost hauling capacity and trains were not usually delayed en route by congestion of traffic. Subsequently it was demonstrated that a higher operating efficiency was attainable by increasing the "tonnage" of trains to the limit of the hauling power of the locomotive. This change of operating policy and the growing congestion of traffic reduced the average speed of trains, and, therefore, reduced the earning capacity of Locomotive Engineers and Firemen for a given period of time.—(*Employees' Ex. 5, pp. 1-2.*)

Mr. Burgess: * * * Assuming that an Engineer ran from A to B, a distance of 125 miles, in Fast Freight service, or Through Freight service, and made that run in seven hours; in the absence of any rule, what would prevent the companies from directing him to go out and make another twenty or thirty-mile run, possibly a turn-around, and only pay him overtime for it?

Mr. Trenholm: I think there should be protection to the men, Mr. Burgess, against any such basis of work.

Mr. Burgess: Then it is your thought that, regardless of the terms of this particular rule, that it is necessary to protect the men in some way, as well as to protect the company?

Mr. Trenholm: I think both should be protected against abuse, yes, sir.—(*Railroads' Witness Trenholm, p. 5255.*)

* * * Having gone between one terminal and another, one hundred miles, or 120 miles, and the mere fact that he has done it in short hours, is not recognized as giving the Railroad a right to put him in the yard, and switch him the balance of the hours, to make it equal his miles, or to use him in any other service outside of possibly emergency service.—(*Railroads' Witness Trenholm, p. 5256.*)

Mr. Mann: Suppose you had a coal train out that had been delayed so that it would not reach its terminal in sixteen hours at the rate you usually had the train go. Would it be possible, with a little extra work in firing, to get up steam enough to make the train run faster?

Mr. Willard: No; I have assumed that the train makes the speed I have spoken of with the engine doing what it was intended to do.

Mr. Mann: You are assuming that the trains are heavy enough to exercise the full duty of the engine, so that you can not make any better speed?

Mr. Willard: Yes.

Mr. Kennedy: To increase the speed you would have to lessen the load?

Mr. Willard: That is what we would have to do. We do that with Fast Freight trains because we cannot do anything else. As I said, we get only 68 per cent of the capacity of the engine on Fast Freights.

Mr. Mann: Would it be possible to set out part of the cars and thereby reduce the weight of the train load, and thereby make better speed?

Mr. Willard: It is possible to do that but it would be uneconomical and delay the business set off. Another train would have to pick it up.—(*Testimony of Daniel Willard, Vice-President, C., B. & Q., Congressional Committee Hearing, 1907.—Employes' Ex. 88, p. 9.*)

Mr. Mann: Outside of the question of the reports, do you claim that a man ought to be required to work more than sixteen hours a day when in a responsible position where sleepiness or tiredness might cause a wreck?

Mr. Payson: I would not like to answer that as you put it, Mr. Mann, because in the course of railroad operations for the last ten or fifteen years, going back no further, the usual course all over the country is to require an average of about sixteen hours maximum on duty. Some Railroads make a maximum limit of eighteen hours, some as low as fourteen, but the average among them all is sixteen. It is sixteen as to the Southern Pacific, as to the Union Pacific, and I am told the same as to the Southern Railroad. I am told by the representatives of the Pennsylvania Railroad, who are at present in the committee room here today, that the maximum hours on that road are sixteen.

Mr. Mann: Is that the usual run?

Mr. Payson: The usual run, that is the maximum day's work that can be exacted.—(*Testimony of L. E. Payson, Counsel for Southern Pacific and Union Pacific, Congressional Committee Hearing, 1906, p. 44.—Employes' Ex. 88, p. 4.*)

Tied up eight hours without food or place to sleep.—(*Employes' Witness Waddell, pp. 1139-1140.*)

Mr. Stone: What is the idea of the rule? Why is it intended that men shall not be released between terminals?

Mr. Cadle: Well, the men have got no place to stay. They lie on their engines as a general thing. They have nowhere to go, to get to bed and get a rest, and when their eight hours are up under the Federal Law, or ten hours, as the case may be, they want to be paid continuous time for the time while they were lying out on the road. They want to get in off the road.—(*Employes' Witness Cadle, p. 94.*)

Article 8—Held Away from Home Terminals.

Engineers and Firemen held at other than home terminal (including rest period) will be paid continuous time for all time so held, after the expiration of 15 hours from time relieved from previous duty, at the rate per hour paid for the last service performed; less than one hour not to be paid for.

It is contended that the foregoing rule should be awarded, because—

(1) Engineers and Firemen are required to incur extra living expenses when away from home, that should be compensated in the manner set forth in this rule.

(a) Trips made with delay at distant terminal less than fifteen hours is estimated to cost from the wages of an Engineer or Fireman \$1.75, or approximately \$22.75 per month of twenty-six working days. This loss is not averted by the rule, but its application will avoid additional expense.

(b) Railroads pay all expenses of shop employees and officials when absent from their homes, but have paid none of such expenses for Engineers and Firemen.

(c) In other industries when agents or employees are assigned to service away from their homes liberal expenses are paid by the employer.

(2) When Engineers and Firemen are held at other than home terminals, their expenses not only continue but their earning power ceases.

(3) The purpose of the Railroads in holding Engineers and Firemen at distant terminals being to await full tonnage for trains, the profits of such practice makes it possible for Railroads to comply with this rule without financial loss.

(4) The burden of decreased traffic should not be borne entirely by the Engineers and Firemen.

Held away from home terminal is expensive and works hardship on employees.—(*Mr. H. T. Newcomb, Counsel for Delaware & Hudson Company* (1906)—*Employees' Ex.* 88, pp. 5-6.)

Cost to Engineers and Firemen of being held away from home terminal.—(*Employees' Witness DeGuire*, pp. 7079-7080.)

Expenses of shop employees and officers while held away from home are paid by the Railroads.—(*Employees' Witness DeGuire*, pp. 7076-7078; *Employees' Ex.* 83, p. 4.)

Crews held away from home thirty-five hours in some cases.—(*Employes' Witness Belding*, p. 1207.)

Held away from home in some instances for a week at considerable expense.—(*Employes' Witness Jones*, p. 1620.)

Held away from home over forty hours.—(*Employes' Witness Hodge*, p. 6594.)

Article 9—Deadheading.

Engineers and Firemen, deadheading on company business shall be paid the same rate and on the same basis as the Engineer and Fireman on the train on which deadheading. Rules in individual schedules governing minimum day, and other conditions to apply.

It is contended that the foregoing rule should be awarded, because—

(1) If the exigencies of a Railroad's business require that Engineers and Firemen be sent from one point to another for the purpose of performing certain assigned duties, the burden of expense of such movements should be borne by the Railroad instead of by the Engineer or Fireman.

(a) In practice, when Engineers and Firemen are Deadheaded from one point to another on the Railroad's business, such employes often are deprived of opportunities to earn full wages in other assignments.

(b) Personal living expenses of Engineers and Firemen are as great while Deadheading as the expenses of the Engineer and Fireman operating the train on which the Deadheading is done.

(c) In wage agreements between Railroads and other employes it is specifically provided that such employes, when sent out on the road, shall receive pay from the time for which they are called until they return and shall be paid overtime rates (time-and-one-half) for all overtime hours, whether waiting, traveling or working, and straight time for what are straight time hours at home station, whether waiting, traveling or working, and in addition thereto all expenses for meals and sleeping rooms when away from home.

(d) On many Railroads the same rates are now paid to Engineers and Firemen while Deadheading as when operating the train.

Mr. Stone: * * * Why is it not a fair theory that when a man is called off the board, who has probably waited two days and got to the top of the extra board, and being first out, is called to deadhead over

the road and thereby loses a freight trip, why should he not be paid full time for deadheading? Why is not such a rule equitable?

Mr. Trenholm: I think such a rule should be considered from all standpoints, Mr. Stone. There might be cases where, perhaps, in a case such as you mentioned, it would be fair to pay him a full day at certain minimum rates.—(*Railroads' Witness Trenholm*, p. 5680.)

Mr. Stone: Is it not a fact that he is not only deadheaded for his own interest, but also to protect the company's interest as well? You may have an Engineer injured, or you may have an Engineer sick at some outlying point.

Mr. Trenholm: Yes, it is mutual, Mr. Stone. It is necessary for a Railroad to get a man to a certain point, whether it is because a man is sick, or injured, or whether he of his own motion applies for leave of absence, and it has been granted, or for short crews at the end of a division, or seniority district, where the business has grown, and you have got to move crews there to handle it.—(*Railroads' Witness Trenholm*, pp. 5680-5681.)

Mr. Burgess: Well, now under your rule, Mr. Trenholm, did I understand you to say they get four cents a mile?

Mr. Trenholm: Four cents a mile, for half the distance.

Mr. Burgess: So, if a man was called at one terminal, at 7 o'clock in the morning, deadheaded on a passenger train 100 miles, he would get four cents a mile for fifty miles?

Mr. Trenholm: Yes, sir.

Mr. Burgess: And if he did not get out for twenty-four hours, he would actually earn \$2.00 in that twenty-four hours.

Mr. Trenholm: I think that is the way the schedule reads. I am not sure as to its application.

Mr. Burgess: You are not willing to admit, Mr. Trenholm, that \$2.00 is a fair day's pay for an Engineer, for twenty-four hours, are you?

Mr. Trenholm: No, sir.—(*Railroads' Witness Trenholm*, p. 5349.)

More than 98 per cent of Railroads in Western Territory pay for deadheading on varying bases, 7 per cent pay same rate as Engineer or Fireman on train.—(*Railroads' Ex. 1*, p. 290.)

Other employes in Railroad service, when sent out on the road are paid full time and are allowed living expenses in addition thereto.—(*Employes' Witness DeGuire*, p. 7071; *Employes' Ex. 83*, p. 4.)

Article 10—Hostlers.

At points where an average of six or more locomotives are handled within twelve hours, day or night, Hostlers shall be maintained.

Hostling positions shall be filled from the ranks of the Firemen, and they shall be paid \$3.35 per day of ten hours or less; provided, that where Hostlers are required to make main-line movements, they shall be paid \$4.75 per day of ten hours or less, overtime in each case to be computed on the minute basis and paid for at the rate of time and one-half.

When such main-line or road Hostlers are paid the same rate as Engineers in switching service, such positions shall be filled from the ranks of the Engineers.

Hostlers shall be allowed one hour for meals between the hours of 11:30 and 1:30, day or night. Hostlers will be assigned regular meal hour between the hours named or after being on duty five hours. Should Hostlers be required to remain on duty after designated meal hour, one hour will be allowed as overtime. No Hostler will be required to remain on duty longer than six hours without having one full hour for meals.

It is contended that the foregoing rule should be awarded because—

(1) Engineers and Firemen while performing road service should not be required to act as Hostlers.

(a) The duties of road service of Engineers and Firemen are extremely arduous and Railroads should not require additional services of them.

(b) Where Railroads now compensate Engineers and Firemen for serving as Hostler, in addition to their road duties, the reduction in expense to the Railroads of relieving Engineers and Firemen of this work, would offset the cost of a Hostler at points where an average of six or more locomotives are handled within twelve hours.

(c) Where Railroads do not now compensate Engineers and Firemen for serving as Hostlers in addition to their road duties they should be relieved of that duty and Hostlers employed to do Hostler's work.

(d) Clerks in offices and mercantile establishments have long since been relieved of janitor's work, mechanics are no longer required to grind tools and clean the machinery they operate before and after they perform a day's labor, and the railway industry should be modernized in like manner by the employment of Hostlers to care for locomotives when not in road service.

(2) Hostling positions should be filled from the ranks of the Firemen except when making main-line movements, when only experienced Engineers should be employed.

(a) Except on Railroads where the safety of property and lives has been subordinated to the money-saving policy of employing only the cheapest of unskilled labor, rules have been in effect for many years that forbid even Firemen to be employed as Hostlers until they have had specified periods of experience as Firemen.

(b) On practically all railroads rules positively prohibit even a Fireman handling an engine except by instructions of the Engineer, and no man without experience as Fireman or Engineer should be permitted to act as Hostler. It is inconsistent for a Railroad, as a safety precaution, to forbid a Fireman handling an engine while the Engineer has charge of that engine, and then permit an inexperienced person to handle an engine as Hostler, where there is no Engineer to supervise the work.

(c) A modern locomotive costs many thousands of dollars to build and is a most complex machine, requiring experience and

skill to properly manipulate. If railway officials, having no personal property interest in their preservation, elect to reduce the expenses of their respective departments by employing incompetent or inexperienced persons as Hostlers, the safety of the lives of the traveling public and of railway employes demands that such practice be prohibited.

(d) Aside from accidents arising directly out of the handling of locomotives by incompetent persons, boiler explosions may result on the road from injuries to crown sheets and tubes, which injuries were caused by incompetent Hostlers permitting water to get low while the engines were in their charge. Where explosions do not result from such incompetence, serious defects may subsequently develop, and the responsibility and penalty for damage to boiler be placed on the Engineer and Fireman. This, if for no other reason, justifies the proposition that only skilled Firemen and Engineers be employed as Hostlers. We respectfully submit that the employment by Railroads of incompetent persons to fill so responsible a position as that of Hostler is inconsistent with the policy of "Safety First," as publicly and persistently advocated by these same Railroads.

(3) Firemen and Engineers should be given preference in the employment of Hostlers by Railroads.

(a) Notwithstanding the rigid physical examinations to which Firemen are subjected before employment by Railroads, subsequent physical examinations of these same Firemen, many of whom have become Engineers, demonstrate that vision has become weakened by the glaring heat of the firebox, that muscles and joints have become stiffened by physical over-strain and exposure to inclement weather, that advancing age has made it impossible for them to longer contend with the hardships of road service. This Proposition requests that such employes be given preference over the man who has just reached Ellis Island, but is willing to accept any employment at any wage offered by the Railroads. We submit that it is pharisaical and inconsistent for Railroads to advertise their so-called "relief" and "pension" schemes and at the same time deny this request of employes who are the victims of the railway industry, denied further employment as Engineers and Firemen, but who are yet physically able to perform the duties of a Hostler, which duties require experience, skill and technical knowledge more than great physical ability. That Engineers and Firemen should be loyal to the interests of the Railroads is readily conceded. That Railroads should not entirely disregard the interests

of Engineers and Firemen is here requested when it is proposed that Hostlers be taken from the ranks of Firemen and Engineers.

(b) As no law, Federal or State, has yet prevented Railroads from placing locomotives in the custody of persons not skilled in the technical knowledge of train operations, when such locomotives are operated upon the main line of railways, we respectfully submit that this Board of Arbitration should award the request that only Engineers be employed as Road Hostlers and that they be paid the same rate as Engineers in Switching Service. Railroads that have demonstrated their regard for safety of patrons and employes in this matter will not permit Hostlers who are not qualified as Engineers to make main line movements.

(4) The advance in rates of wages requested in the Proposition for Hostlers should in no manner deprive them of opportunity to eat one meal during each day's service, and this opportunity to eat should be presented at a reasonable hour. From 11:30 o'clock to 1:30, day or night, permits each Railroad to assign any one hour in a period of two hours. The rule is sufficiently elastic to meet local conditions on any Railroad.

(a) Where Hostlers are employed in day and night shifts the time specified in this rule for meals is reasonable, but where Hostlers are required to begin work at other than the usual time after being on duty five hours they should be granted an hour for eating.

(5) As laws are enforceable only by penalties, so rules for meal hours are enforceable only by penalties. Where Railroads disregard the rule they should be required to pay for one hour's work not performed, which may result in the rule being applied.

(6) No Hostler should be required to remain on duty longer than six hours without having one full hour for meals, and the rule should specifically so state.

(7) The rate requested in this rule is equitable. Ten hours work by a competent Hostler, even though not qualified as an Engineer, should be worth \$3.35 to a Railroad. The rate per hour of 33½ cents is much less than is paid in other industries for labor less skilled and work less important. No Engineer should be paid less than \$4.75 for ten hours work, and none but men qualified as Engineers should be permitted to serve as Road Hostlers. When an Engineer works for

47½ cents an hour, a railroad is paying less for its skilled labor than other employers.

(8) Hostlers should not be required to work more than 10 hours per day.

(a) It is as practical, and less expensive, for a Railroad to relieve a Hostler from work at the end of 10 hours as it is for that same Railroad to release a shop mechanic at the end of 8 hours, which is the rule.

(b) The only practical method of limiting a day's work is the usual method of paying time-and-one-half for overtime.

(c) If the requirements of a Railroad's business makes it profitable to work Hostlers overtime the rate should be time-and-one half.

(9) For Hostlers, as for all railway employes, all overtime should be paid on the minute basis.

Engineers disciplined for accidents while hostling their engines, for which service they receive no compensation.—(*Employes' Witness Kearns*, p. 921.)

Duties of a Hostler.—(*Employes' Witness Holloway*, pp. 1416-1417; *Railroads' Witness Hewitt*, pp. 4458-4459.)

On quite a number of Railroads Hostlers are taken from the ranks of Firemen.—(*Employes' Witness Moore*, pp. 132-134.)

Firemen after passing all examinations are not permitted to handle engine except under immediate direction of Engineer.—(*Railroads' Witness Clewer*, pp. 4525-4526.)

Mr. Sheean: They are paid this monthly wage of \$82.60, days, and \$87.60, nights?

Mr. Higgins: Yes.

Mr. Sheean: Hostlers, all this time, on the Missouri Pacific, have been on a monthly wage, have they?

Mr. Higgins: Yes; since 1888, that we have a record of.—(*Railroads' Witness Higgins*, p. 4720.)

Mr. Carter: Does the Rock Island do like other roads often do, and employ men that cannot speak English language as Hostlers' helpers?

Mr. Clewer: I do not know what the other roads do, but I know that we do not draw the line on the nationality.—(*Railroads' Witness Clewer*, p. 4521.)

Well, in the year 1913, in March, I saw a coal car get away through the incompetency of a Hostler handling the engine, and it nearly resulted in the worst Railroad accident we would have had on the Peninsula Division. * * *

The car continued on down this grade, which was on the main line at Crystal Falls, Michigan; continued on down the hill two miles. At

this time of night there was a passenger train due to leave Stager at 6:45, No. 57. Stager is fifteen miles from Crystal Falls, and there is no telegraph office intervening. When this car got away, it was ten minutes after the train was due to leave Stager. We all saw it happen and headed for the telegraph operator and tried to get him on the wire, and finally we did get Stager and found out that No. 22 was late and the Crystal Falls passenger train did not leave Stager, which is the junction point, until after we had gotten the message to them, and they held them there until this man went down to the bottom of the hill, two miles below, and returned with this car of coal.—(*Employes' Witness Rose*, pp. 1541-1542.)

Only qualified men should be used to handle engines.—(*Railroads' Witness Trenholm*, p. 5683.)

Trying to support a family of six on a Hostler wage of \$2.00 per day.—(*Employes' Witness McClory*, p. 1439.)

Mr. Nagel: During these twelve hours are you constantly employed?

Mr. McClory: Yes, sir; sometimes I am eating a piece of lunch and have to run to an engine which has broke down, or an engine goes out, or a crew comes in off an engine, and I have to be on the job.—(*Employes' Witness McClory*, pp. 1444-1445.)

Article 11—Surprise Tests.

That the practice of conducting Surprise Tests by turning switch lights and placing red lights, or flags, unaccompanied by torpedoes, beside track, or wiring down automatic signals to proceed position, be eliminated.

It is contended that the foregoing Proposition should be awarded, because—

(1) The nervous shock, incidental to some of the so-called "efficiency tests," or Surprise Tests, experienced by Engineers and Firemen subjected to such tests, are inimical to the interests of the traveling public, highly injurious to the mentality of Engineers and Firemen, and an economic loss to the Railroads.

(a) Men in charge of the operation of locomotives should have complete command of their mental faculties, if trains are to be transported safely. Men whose judgment has been warped by exposure to unreal but threatened danger, whose sense of caution has been dulled by the cry of wolf oft repeated, are not safe men to operate trains, and if the traveling public knew the facts, laws would be enacted to enforce this rule requested.

(b) When an Engineer and Fireman are confronted by a seeming disaster—a misplaced switch or a collision—"they live a lifetime in a minute," as has been aptly stated during this arbitration.

That there is no real danger cannot be known to them, in fact, must not be known to them if the purpose of the test is to be accomplished. Possibly the train might be stopped before the apparent danger is reached, by an emergency application of the brakes, but after this is done the measuring of distance by the eye, in the darkness of the night, from the rapidly moving engine to what appears to be death is not practicable. Presuming that neither the Engineer nor Fireman leaps from the engine, hoping to avoid being crushed in a derailment or collision: presuming they stop the train before the point of threatened danger is reached, the shock to the nervous system leaves its effect ever afterward.

(c) Just as a cruel driver may destroy the value of a horse by subjecting it to unusual punishment, or threatened punishment, so may a railway official, whose hobby is to "test" Engineers and Firemen with make-believe derailments and collisions, utterly unfit them for efficient service. As some Railroads cannot distinguish between proper efficiency tests and dangerous Surprise Tests we request the awarding of this rule.

Dangers and abuse of Surprise Tests.—(*Employes' Witness Young*, pp. 1324-1326.)

Mr. Park: Have you ever heard of cases where Engineers jumped off the engine, when danger was impending?

Mr. Trenholm: Yes, and to be honest with myself and this Board, I believe that the condition could, by surprise test under proper conditions, so startle a man and come on him so suddenly, that he would not be responsible for what he did.—(*Railroads' Witness Trenholm*, p. 5401.)

I agree that anything that endangers the life of the employe should not be practiced.—(*Railroads' Witness Trenholm*, p. 5389.)

Article 12—Assistance for Firemen.

On all locomotives in freight service where but one Fireman is employed, and on all locomotives in passenger service, coal will be kept where it can be reached by the Firemen from the deck of the locomotive. Coal of the proper size for firing purposes will be placed on all tenders.

It is contended that the foregoing rule should be awarded, because—

(1) With the increased size of locomotives, with the increased tonnage of freight trains and with the increased weight and speed of passenger trains, tenders of greater capacity have been placed in service, with the result that much of the coal burned in a locomotive is handled twice by the Firemen.

(a) The manner of keeping coal within reach of the Fireman is not prescribed. On some Railroads where this service is rendered mechanical coal-pushers have been installed, and by their operation the coal is forced forward at the will of the Fireman, and in a manner that makes it unnecessary for him to shovel the coal ahead before again shoveling it into the fire box. On other Railroads men especially employed for the purpose are required to go back and forth on locomotives between certain points, shoveling coal from the back end of the tenders to the front. On other Railroads men are placed at certain points who shovel coal forward on all engines passing that point. On other Railroads coaling stations are maintained at short intervals so that coal can be taken as often as necessary to avoid the necessity of shoveling the coal twice. On many Railroads this work is still required of Firemen and the rule should be awarded.

Five or six tons of coal shoveled down out of every tankful.—(*Employees' Witness Mohler*, p. 1823.)

I shoveled down coal for a distance of thirty-six miles on an uphill grade, all except about five miles.—(*Employees' Witness Beil*, p. 6683.)

All but six tons, out of sixteen or seventeen tons, shoveled down with best tank on Rock Island.—(*Employees' Witness Grier*, pp. 6787-6788.)

Mr. Shea: Mr. Wilke, it is quite a relief for a fireman to have someone assist in shoveling the coal down, is it not?

Mr. Wilke: You bet your life it is.—(*Employees' Witness Wilke*, p. 6679.)

Mr. Stone: Is it a common practice on the Galesburg Division for Engineers and brakemen to help the Firemen out on these heavy tonnage trains?

Mr. White: It is, yes, sir.—(*Employees' Witness White*, p. 6798.)

Six tons of coal pulled down.—(*Employees' Witness Kalber*, p. 6642.)

Twenty-eight tons of coal burned within sixteen hours.—(*Employees' Witness Hicks*, p. 1763.)

(2) On many Railroads, long before the large tenders of today were built, rules were conceded to Firemen that coal would be broken to proper size for firing and on some Railroads these rules are enforced. To secure a uniformity of the rule and to lend the prestige of a Federal Arbitration to its enforcement, we ask that this rule of the Proposition be included in the award. Coal could be broken to proper size for firing at coaling stations before it is delivered to the locomotive at no great expense to the Railroads and thus afford relief for the over-worked Fireman. Seldom has a Fireman the time to properly break coal and it is well known to railway officials that the expense of breaking coal to proper size for firing is saved in the more economic combustion of that fuel.

Hopper tanks will not do work of mechanical coal pusher.—(*Employees' Witness Laherty*, pp. 6612-6613; *Employees' Witness Kalber*, p. 6644.)

Firemen have to shovel down large amount of coal.—(*Employees' Witness Roberg*, p. 6665; *Employees' Witness Dady*, pp. 6741-6742; *Employees' Witness Vance*, p. 1755.)

Robert Quayle, Superintendent of Motive Power, Chicago and North Western Railway, mentioned the possibilities of increasing the thermal efficiency of locomotives. He agreed that the large grate area was more efficient for burning coal as suggested in Dr. Goss' paper of last year. Particular stress was laid on the proper preparation of the coal for the locomotive and of assisting the Fireman as much as possible, in the performance of his work.—(*Railway Age Gazette—Employees' Ex.* 51, p. 52.)

Fuels should be properly prepared for delivery to the engine tender and a uniform grade of fuel should be supplied where possible.—(*Robert Collett, Pres. International Ry. Fuel Ass'n—Employees' Ex.* 51, p. 52.)

Keeping coal within reach of Fireman increases efficiency.—(*Employees' Ex.* 51, pp. 54-55.)

Breaking coal effects saving in fuel and increases efficiency.—(*Employees' Ex.* 51, pp. 53-54.)

I think coal should be broken to proper size.—(*Railroads' Witness Trenholm*, p. 5701.)

Article 13—Two Firemen.

On coal-burning locomotives weighing 185,000 pounds or more on drivers, when used in freight service, two Firemen will be employed.

It is contended that the foregoing rule be awarded, because—

(1) That the physical requirements for properly firing a large locomotive are beyond the capacity of one man is conceded by practically all whose personal observation has given them a knowledge of the subject.

(a) While, in Arbitrations certain witnesses for the Railroads always testify that Firemen perform little or no physical labor, such testimony is unworthy of serious consideration. In the discussion of this problem by railway officials at their technical conferences no attempt is made to conceal the fact that the work is greater than the capacity of one man, if the locomotive burns the amount of coal necessary to maintain its highest efficiency.

(b) Vast sums of money have been expended by Railroads during the last ten years in the development of mechanical stokers, most of which, after having given promise of success, proved impractical because of the great expense of maintenance. Experi

ments with these mechanical stokers have demonstrated that it is not only the human machine that breaks down under the trying ordeal of successfully firing a large locomotive. The "wear and tear" on the human Fireman is far less expensive to the Railroads than the constant repairs and renewals of parts of the mechanical stoker. New candidates for favor are now in the field of mechanical stokers and are reported just as perfect in their operation as other stokers that have been discarded, stokers that once were reported to have been perfect. The sole reason for the persistent efforts to perfect an economical mechanical stoker, and so stated by technical experts, is that one Fireman cannot shovel coal fast enough, when most coal is most required, to evaporate the amount of water necessary to maintain the locomotive at its highest efficiency.

(c) The mechanical stoker costing too much to install and maintain, as is made evident by a refusal of Railroads to place them in service in any considerable number, and the work being more arduous than one man can perform, we respectfully submit that this Board of Arbitration should decide in their award that two Firemen be employed on all coal-burning locomotives weighing 185,000 pounds or more on drivers, when used in freight service.

Locomotive Firemen are, physically, the hardest worked men in railway service. We believe the day will come when mechanical engineers will look back with amazement upon the conditions which required Firemen to toil like beasts of burden maintaining steam, when power was at hand to perform the work mechanically.—(*Railway and Locomotive Engineering—Employes' Ex. 51, p. 44.*)

I dare say the standard locomotive on most roads would be fifty tons lighter if it had been foreseen that the "perfect stoker" was not at the threshold. The power of the present day is breaking down the Fireman before he is fitted to assume the more responsible duties at the throttle.—(*Com. Report Traveling Engineers' Ass'n Pro. 1911, p. 206—Employes' Ex. 51, p. 43.*)

Speaking of the laborious work that the Firemen have to do today on the heavy power, hauling heavy trains, I believe that we must, sooner or later, resort to something else besides hand firing.—(*G. W. O'Neill [N. Y. O. & W.], Trav. Engrs. Ass'n Pro. 1911, p. 133—Employes' Ex. 51, p. 43.*)

Even with boilers of modern construction with their economical use of fuel, the still growing demand for locomotives of greater capacity has called for a crew of two firemen or the use of mechanical stokers in order to burn coal at the rate required * * * the increased hauling capacity of the heavy Mallet was secured at the expense of speed on the ruling grade, due to the limitations of one man throwing coal.—(*A. H. Armstrong, Assistant Engineer, Railway Department, General Electric Company, Railway Age Gazette, January 2, 1914, p. 11—Employes' Ex. 51, p. 49.*)

Locomotives have been increasing in power every year until the question of firing the huge boilers to maintain the required pressure of steam

has become too great for human muscle and endurance.—(*Railway and Locomotive Engineering*, August, 1913, p. 282—*Employes' Ex.* 51, p. 48.)

The limit of human endurance in shovel firing has surely been reached.—(*Railway and Locomotive Engineering*, May, 1914, pp. 161-163—*Employes' Ex.* 51, p. 50.)

Necessity for Two Firemen.—(*Employes' Ex.* 51, pp. 41-50.)

Twenty-eight to thirty tons of coal burned between Chicago and Galesburg.—(*Employes' Witness White*, p. 6794.)

Engine burned coal so fast that both Engineer and Fireman fired at same time.—(*Employes' Witness House*, pp. 6766-6767.)

Fireman working practically all the time.—(*Employes' Witness Laherty*, p. 6636.)

(2) By the increased efficiency of the locomotive when two firemen are employed the expense of the second fireman would be more than offset.

(a) In official tests it has been demonstrated that the cost to the Railroads of Firemen per ton mile is less with two Firemen than with one Fireman, or with a mechanical stoker.

(b) At a freight rate of 1 cent per ton per mile one forty-ton car of freight added to a train where a second Fireman is employed will produce additional revenue for the Railroad sufficient to pay three times the entire wages of the Engineer and both Firemen.

(c) The greater efficiency of a locomotive fired by two firemen will probably increase the speed of the train sufficient to avoid payment of overtime to the entire engine and train crew to the extent, on many trips, of offsetting the wages of the second Fireman.

(d) Tie-ups under the Federal Hours of Service Act, and violations of that law, would, in many instances, be avoided by the employment of two Firemen, who could maintain the locomotive at its highest steam pressure at all times and thereby increase the speed. Often the lack of but a few minutes to reach another passing track before a superior train is due at that siding results in hours of delay.

Tie-up would be avoided and overtime reduced by two Firemen on one engine.—(*Employes' Witness Hicks*, pp. 1763-1764.)

The locomotive upon which our figures were based was of the Mallet type, having a tractive force of 65,000 pounds, which would enable it to haul at slow speeds 4,200 tons up the $\frac{1}{2}$ per cent grade track on which our figures were made, ascending the grade at six, ten and fifteen miles per hour, and it was assumed that one Fireman could handle 3,000 to 4,000 pounds per hour throughout the forty miles upgrade, or that two men, by working in relays, would be needed to supply 6,000 to 8,000 pounds an hour,

but for quantities over this a mechanical stoker would be necessary. As the grate area of this locomotive is seventy-eight square feet, it will be seen at once that it would be possible to burn from 12,000 to 15,000 pounds of coal per hour if found desirable or necessary. * * * These figures, therefore enable one to see at a glance the variation in cost and capacity due to one or two Firemen, or to a mechanical stoker. * * *

It is seen, therefore, that by far the greatest amount of work done by the engine is with the use of a stoker and running up hill at a speed of fifteen miles per hour, the assumption being in this case that there would be 15,000 pounds of coal burned per hour, while running up the grade. The cost per 1,000 ton-miles is less than if we attempted to run with one-half the load at the same speed up-hill with only one Fireman, and it is only three cents greater than if we went up the hill at six miles an hour with a single Fireman. At ten miles an hour, two Firemen would give very nearly the same capacity of the locomotive and at somewhat lower cost, * * * The advantage of being able to push the engine to its full capacity and at a fairly high speed is shown without any uncertainty. —(*G. R. Henderson, Mech. Eng., Am. Ry. M. M. Ass'n, Pro. 1909, p. 68—Employes' Ex. 52, p. 46.*)

(3) Firemen and Engineers agree that to oppose the introduction of larger locomotives, would be improper from an economic viewpoint. They appreciate the fact that the larger the locomotive the greater the tonnage of the train and consequent earnings of the Railroads.

(a) Firemen agree that they should fire these huge locomotives to the extent of their physical welfare, but, having gone to this extent, the Railroads should not shirk a moral obligation that rests upon them.

(b) It is unfair that Railroads should withhold the assistance of a second Fireman, when by so doing the exhausted condition of the one Fireman necessitates his laying off for recuperation, and thereby losing the earnings of a day or trip.

(4) The theory advanced by the Railroads that the introduction of superheating devices is a factor in the fixing of wage rates for Firemen is not practical.

(a) While it is conceded that a perfect working superheater reduces the amount of coal burned in transporting the same tonnage, in practice the tonnage is increased instead of the coal saved.

(b) Superheating devices require constant and careful attention of boilermakers to maintain their efficiency, and in practice this is not always done, with the result that instead of being a relief to the Firemen, they actually add to their labors, because of development of leaking joints, obstructed tubes and other ailments to which superheating devices are subject.

(c) Where steam superheating devices have been properly maintained the tonnage of trains has been increased to the extent that past wage increases have been offset by increased earnings. This feature of superheater practice should tend to increase rather than decrease rates of wages of Firemen.

(5) In no other other steam plant has the employer required one Fireman to perform the work, regardless of the power generated.

(a) As the size of the steam vessel increases, so does the number of Firemen and Engineers employed.

(b) It is a common practice of Railroads to employ a second Engineer and Fireman, on a second engine, when a train is too heavy for one engine to pull at the speed required. In Passenger Service the addition of a single coach or sleeper sometimes necessitates the use of another engine and crew as Helper. In the same manner there is a point in physical effort beyond which one Fireman should not be required to go, and that point is fixed in the Proposition at locomotives less than 185,000 pounds on drivers. It is as reasonable for Firemen to request that a limit be fixed beyond which two Firemen will be employed as it is for the Railroads to add another engine and crew to a train when the capacity of one locomotive is reached.

(6) Upon the presumption that the substance of this rule will be awarded, the Board of Arbitration is urged to not refer to another Board of Arbitration the question of when the award of this Arbitration should be applied, as was done on a former occasion.

Another very interesting feature shown by the dynamometer car, which accompanies the test at all times, was that we were able to haul from 150 to 300 tons more freight with the superheater engine than we were with the non-superheater engine, so I think the results obtained bear out the statements expressed in the Purdue University paper.—(*J. F. DeVoy, A. S. M. P., C., M. & St. P., Am. Ry. M. M. Ass'n, Pro. 1911, p. 251—Employes' Ex. 51, pp. 30-31.*)

As the greater sustained tractive efforts of the large engine equipped with superheaters and brick arches is gradually taken advantage of, its fuel consumption per hour will increase, though decreasing on the ton-mile basis.—(*Report of Committee on Mechanical Stokers, Amer. Ry. M. M. Ass'n, Pro. 1912, p. 69—Employes' Ex. 51, p. 33.*)

Within the last year we have heard remarks made to the effect that the general introduction of steam superheaters will reduce the Fireman's work to such an extent that mechanical stokers will no longer be necessary, but we regard that as a mistaken view, for the increasing capacity of locomotives is likely to hold good the necessity of doing the heavy drudgery of firing by mechanical means.—(*Railway and Locomotive Engineering—Employes' Ex. 51, p. 33.*)

Take their 1-8 class, of which they have quite a number. They were originally 20x32, with a steam pressure of 210 pounds; a tractive effort of 39,090 pounds; they have been superheated, given cylinders 26x32, the steam pressure reduced to 160 pounds, and their tractive effort is now 53,000 pounds, an increase of 41 per cent.—(*Employes' Counsel* [Mr. Stone] reading from official description of locomotives, Great Northern Railway, p. 4346.)

Superheaters make it possible to get a higher sustained tractive power out of a locomotive. The savings resulting from their use, therefore would not show upon a locomotive mileage basis, but would appear when figured on a ton-mile basis, which is, to a certain extent, proportional to the work done.—(*Com. Report, M. M. Ass'n, 1914—Employes' Ex. 51, p. 35.*)

Increased power and tonnage as result of application of superheaters.—(*Employes' Ex. 51, pp. 27-33.*)

Superheaters increase tonnage and coal consumption per hour.—(*Employes' Ex. 51, pp. 33-34.*)

Superheaters subject to leaking joints.—(*Employes' Witness Vance, p. 1744.*)

Superheaters hard to fire.—(*Employes' Witness White, p. 6794.*)

Firemen prefer saturated engines to superheaters.—(*Employes' Witness Vance, p. 1745.*)

If they fail to keep the flues clean, allowing them to stop up with honeycomb and cinders, so that they burn three or four tons of coal more than they should, the object of the investment has been defeated and the engine is in reality not so good as a saturated steam engine in first-class condition.—(*W. G. Tawse, Locomotive Superheater Company, Traveling Engineers' Pro., 1913, p. 78—Employes' Ex. 51, p. 36.*)

Where you have the superheater encased in superheater tubes a condition exists there that makes it possible to do a great deal more damage than if you had a saturated steam engine, because the superheater units with their supports are in there in such a way that they are ready to catch some of this stuff.—(*J. W. Hardy, C. R. I. & P., Traveling Engineers' Pro., 1913, p. 97—Employes' Ex. 51, p. 38.*)

It was recently my privilege to visit the shops of a large trunk line railroad in the East, and also while there to make an examination of about fifteen sets of superheat tube units and headers with engines in the shop for general repairs. Almost all of the return bends of the superheat tube were encrusted over with about an inch of hard clinker extending out about 2½ inches.—(*W. C. Hayes, Sup. Loco. Opr., Erie, Travelling Engineers' Pro., 1913, pp. 81-82—Employes' Ex. 51, pp. 37-38.*)

Inquiry as to the means by which the increased cost of labor employed in train movement was partially, or wholly, or even more than wholly, offset on the various lines, has elicited the information that an extensive adoption of superheaters on the locomotives of the system has made possible a large increase in capacity per locomotive, making it practicable to haul additional cars per train at proportionately lower cost, and with a large saving in engine mileage, which was also appreciably affected by the reduced need for double headers. About 25 per cent of

the locomotives on the western lines have been equipped with superheaters during the past year or so, and the number is being rapidly increased all over the system.—(*Railway Age Gazette—Employes' Ex.* 51, pp. 34-35.)

Superheaters reduce operating costs.—(*Employes' Ex.* 51, pp. 34-35.)

Article 14—Cleaning of Locomotives. Setting up Wedges, Filling Grease Cups and Cleaning Headlights. Placing of Supplies on Locomotives.

On railroads where Firemen are required to clean locomotives, they shall be relieved of such service.

Where Engineers and Firemen are required to set up wedges, fill grease cups, or clean headlights, they shall be relieved of such service at all points where roundhouse, or shop force, or an engine watchman is employed.

Where Engineers and Firemen are required to place on or remove tools or supplies from locomotives, fill lubricators, flange oilers, headlights, markers or other lamps, they shall be relieved of such service at all points where roundhouse, shop force, or an engine watchman is employed.

It is contended that the foregoing rule should be awarded, because—

(1) The cleaning of engines is not a Fireman's work.

(a) Railroads never paid Firemen for cleaning engines, and insisted on them performing this work only because Firemen could be coerced into cleaning engines without compensation therefor.

(b) In the Western Firemen's Concerted Wage Movement of 1907 an agreement was reached with the Railroads that Firemen would no longer be required to perform this work. Many of the Railroads had of their own volition abandoned this abuse years before.

(c) To avoid a revival of this practice and to make the rule uniform on all Railroads it is urged that this rule be made a part of the Award.

(2) Engineers and Firemen should not be required to set up wedges, fill grease cups, or clean headlights, where the Railroads maintain roundhouse or shop force or where a watchman is employed.

(a) The setting-up of wedges is a machinist's work, and should be done by machinists.

(b) Filling grease cups and cleaning headlights should be done by roundhouse employes while Engineers and Firemen are securing rest from their previous trip or day's work.

(c) Many Railroads have abandoned the practice of compelling Engineers and Firemen to do this work.

Filling grease cups and preparing engine after it has been coupled to train greatly increases Hazard of Fireman.—(*Employes' Witness Jackson*, pp. 978-979.)

Few Railroads require Engineers or Firemen to set up wedges, fill grease cups or clean headlights.—(*Railroads' Ex. 1*, p. 312; *Railroads' Witness Trenholm*, p. 5436.)

(3) Engineers and Firemen should not be required to place on or remove tools or supplies from locomotives, or to fill lubricators, flange oilers, headlights, markers or other lamps, where roundhouse or shop force, or a watchman is employed.

(a) Railroads should provide a complete set of necessary tools for every engine, instead of requiring Engineers and Firemen to carry them back and forward between tool rooms and engines. If sufficient tools are not available to properly equip all locomotives in service, others than Engineers and Firemen should be assigned the duty of shifting them.

(b) The filling of lubricators can best be done when engine is not in service. On the road, with high steam pressure, and sometimes leaking steam valves, the hot oil is often blown over the roof of the cab, much to the danger and discomfort of the Engineers and Firemen.

(c) Flange oilers, headlights, markers and other lamps should be filled when engines are not on road, and by men employed for that purpose.

(4) Many Railroads have long since abandoned the practice of requiring Engineers and Firemen to do the work named in this rule, and if Engineers and Firemen were now compensated for this service no Railroad would require it to be done by them; therefore, the entire rule should be made a part of the Award.

Few Railroads require Engineers or Firemen to place on or remove tools and supplies from engines, fill lubricator, etc.—(*Railroads' Ex. 1*, p. 312; *Employes' Witness Moore*, p. 125.)

Article 15—Official Record of Weights on Drivers.

For the purpose of recording weights on drivers, each railroad, parties to this agreement, will permanently post bulletins at all terminals showing accurate service-weights of all locomotives.

It is contended that this rule should be awarded, because—

(1) A failure to publish for the information of all Engineers and Firemen an official record of the accurate service-weights, on drivers, of all locomotives will result in abuses and disputes as to proper payments for services rendered by Engineers and Firemen.

(2) The correct weight of each locomotive on drivers should have been reported to the Railroads by the builders, and the additional weight of coal and water, etc., should be determined by test, and when the total weight on drivers of each locomotive is thus determined the information should be bulletined.

No reason why Railroads should hesitate to furnish accurate service weights of locomotives.—(*Railroads' Witness Trenholm*, p. 5442.)

Article 16—Throwing Switches and Flagging.

Engineers and firemen will not be required to throw switches, flag through blocks, or fill water cars.

It is contended that this rule should be awarded, because—

(1) It is unfair that Brakemen and Switchmen should be displaced by Railroads for economic reasons and then require Engineers and Firemen to perform the work of Brakemen and Switchmen.

(a) Brakemen have sought the restoration of the third man on freight trains, because of the hazard and additional labor of operating a modern tonnage train with but two men. Railroads have opposed the employment of this additional Brakeman, and some Railroads have insisted that Engineers and Firemen do the work of Brakemen.

(2) There should be a sufficient number of Switchmen and Brakemen employed to throw switches and flag through blocks, for Firemen are required by the rules of all Railroads to assist the Engineer in engine duties and to carefully watch for signals. This cannot be done with the Fireman off the engine performing Brakemen's or Switchmen's duties.

(3) Firemen are clothed especially for the hot work of firing locomotives and usually their clothing is saturated with perspiration. To require Firemen in this condition to go out in zero weather to do Brake-men's and Switchmen's work should be prohibited by this Award.

The practice of not requiring Engineers and Firemen to throw switches or flag through blocks is established.—(*Railroads' Witness Bremerman*, p. 3318.)

III. EARNING POSSIBILITIES UNDER EXISTING RATES AND RULES.

In the opening statement to this Board of Arbitration, Counsel for the Railroads based his opposition to the Proposition here submitted for decision upon the earning possibilities of some Engineers and Firemen under the existing rates and rules, contenting himself with the assertion that "the present rates of pay and compensatory rules, as applied on the different Railroads involved in this movement are full, fair and adequate." In support of this line of defense the Railroads have concentrated their efforts, presenting statistical statements and testimony of witnesses that demonstrate conclusively that it is possible for Engineers and Firemen, by working from twelve to sixteen hours every day, to earn far more in a month or a year than employes in other industries can earn for the same period of time when working only eight hours per day and on only the usual working days, excluding Sundays and holidays.

It was conceded by the Engineers and Firemen in the early testimony and documentary evidence submitted by them that under the piece-work and seniority systems, long in effect, a comparatively few of their fellow workmen could, by great physical effort and continuous employment, add to their earnings in a marked degree.

There being but slight difference of opinion between the Railroads and the Enginemen on this point, the real contest has been the efforts of the Railroads to convince the Board of Arbitration that these exceptionally high earnings are typical of the earnings of all Engineers and Firemen under the existing rates of wages and compensatory rules. If the Railroads could create the impression that all Engineers and Firemen earn as much as some Engineers and Firemen occasionally earn, it was evidently anticipated by the Railroads that a victory would be won, the Proposition defeated, and the old order of things continued.

In denial that the earnings of the few are typical of the earnings of all, or the earnings for October, 1913, are typical of earnings for other months, the following is submitted:

(1) Under the piece-work system, combined with the seniority system, the Engineers and Firemen longest in service are enabled to earn in a given month or year far more than their fellow workers who are juniors in the service.

(a) Wages of Locomotive Engineers and Firemen employed in road service are based upon certain rates per hundred miles traveled by the locomotive they operate, consequently, the higher the speed of the train the greater the opportunity to add to earnings in a given time. There being no limitation to the number of hours worked in one trip, or a series of trips, so long as the "sixteen-hour law" is not openly violated, those with the greatest physical capacity are able to make many miles, or complete many "pieces," under this piece-work system within one month's time, and the earnings of these few is one of the principal supports on which the Railroads rest their case.

The opposition to the piece-work system by workers in other industries has been the result of this unfair attitude of employers. In the Homestead strike of 1892 the mill owners defended their methods of defeating their former employes by asserting that under the piece-work system then in practice a certain gang leader had earned \$16 in one day. The fact that under that same system a great majority of the workers earned but a bare subsistence was unknown to the public.

(b) In all piece-work systems of compensating workers, after a rate per piece is established, more work per piece is exacted, and a contest continues between the worker, who seeks to increase the compensation per piece, and the employer, who exacts more and more service per piece. So it has been with Engineers and Firemen, a constant struggle to have rates per mile keep pace with work exacted per mile. Trains in Freight service formerly were operated at comparatively high speed, under the theory of Railroads then popular, that prompt service brought business. Since then managerial efficiency has demonstrated that speed is a negligible factor; that the greatest number of tons of freight that can be transported by one Engineer and one Fireman is an economic masterpiece. To compensate in some degree this loss of earning power per 100 miles, existing rules provide on ten-hour Railroads that when the speed of the train falls below an average of ten miles per hour the Engineers and Firemen will receive the same compensation for six minutes of time on duty as is paid for one mile traveled; thus Engineers and Firemen on such Railroads receive a "day's" pay for "100 miles or less, ten hours or less."

This transformation of wage basis from miles to hours has deprived the physical enthusiast of opportunity to make many miles, but has left to him the privilege of working 16 hours every day, and if he has been in the service long enough to escape the effect of seasonal fluctuations in railway business, he is privileged to work every day in the year, and thereby find his name among the notables submitted by the Railroads in this Arbitration as their principal reason why the thousands of other Engineers and Firemen whose earnings are comparatively low, should not receive recognition by this Board of Arbitration.

(c) To accomplish their purpose of demonstrating "that the present rates of pay and compensatory rules are full and adequate" the Railroads have based their computations and estimates of expense of complying with the Proposition, upon the payrolls of Engineers and Firemen for the month of October, 1913, the month in which the Railroads' business was the greatest in the Railroads' history. If it could be shown that a majority of Engineers and Firemen received comparatively large pay checks in October, 1913, the Railroads presumed their contentions to have been sustained. That each of a majority of these Engineers and Firemen did two men's work and thereby earned two men's pay in October, 1913, many of whom earned less than half as much in other months of the same fiscal year, was overlooked in the statements of the Railroads until attention was called to these facts.

(d) The rate of wages per hour is the true index to the earnings of all Engineers and Firemen in Switching Service, of a majority of Engineers and Firemen in Through and Local Freight Service, and of all Hostlers. The fact that some men are physically able to average fourteen hours of work every day should be given no consideration in determining an equitable rate per hour. The fact that in October, 1913, the business of Railroads was so great that a majority of the men were required to work a greater number of hours than in any other month in the history of Railroads is no reason why the rates of wages per hour for Engineers and Firemen should be exceedingly low.

(e) Compared with the average rates of wages of employees in other industries, Locomotive Engineers in Freight Service rank below fifteen leading trades. Engineers in Switching Service in the City of Chicago work for forty-two and one-half cents per hour, where Hod Carriers are paid forty-eight cents an hour and skilled workers in other trades are paid from sixty-five cents to seventy-five cents an hour.

In a statement of average wages per hour in seventeen Western Cities, for the year 1913, for forty-six trades, the wage of Locomotive Firemen in Freight Service ranks thirty-eighth, lower than helpers and laborers in some industries. In the City of Chicago a Locomotive Fireman in Switching Service receives twenty-five cents per hour for his services, while the Hod Carrier in the same city is paid forty-eight cents per hour.

Locomotive Hostlers employed by one of the most important and prosperous of Western Railroads are required to work twelve hours per day at twenty-five cents per hour.

* * * Cheap transportation means carrying as large a load as is proper and consistent with good policy. * * *

* * * Ten miles an hour, including all stops and ordinary delays, is an economical speed for freight trains—and I think that is in accordance with the practice on most roads. * * * —(*D. Willard, V. P., C. B. & Q. Railroad—Employes' Ex. 5, pp. 1-3; Employes' Ex. 88, p. 9.*)

Piece Work and Seniority System Responsible for High Earnings of a few Engineers and Firemen.—(*Employes' Ex. 5, p. 2; Railroads' Witness Keefe, p. 3820; Employes' Witness Carter, p. 579.*)

October, 1913, used by the Railroads to prove high earnings of Engineers and Firemen.—(*Railroads' Ex. 3, 29, 30, 30A and 45.*)

Month of October, 1913, Greatest in the Railroads' History.—(*Employes' Ex. 71, p. 2, etc.*)

Earnings of Engineers and Firemen for month of October, 1913, compared with earnings of other months—for same Fiscal Year.—(*Employes' Ex. 85, pp. 18-25.*)

Rates of Wages per Hour and Earnings for Continuous Service of Engineers in Switching Service on Western Railroads.—(*Employes' Ex. 5, p. 105.*)

Rates of Wages per Hour and Earnings for Continuous Service of Firemen in Switching Service on Western Railroads.—(*Employes' Ex. 5, p. 113.*)

Rates of Wages per Hour of Engineers and Firemen less than that of Employees in Other Industries.—(*Employes' Ex. 5, p. 10.*)

Rates of Wages per Hour and Earnings for Continuous Service of Locomotive Hostlers on Western Railroads.—(*Employes' Ex. 5, p. 123.*)

Earning possibilities under existing rates and rules.—(*Employes' Ex. 5, pp. 1-4.*)

Exceptionally High Earnings of Engineers and Firemen.—(*Railroads' Ex. 3, 29, 30, 30A and 45.*)

Highest Average Speed of trains between terminals Bring Highest Earnings.—(*Employes' Ex. 5, p. 1.*)

IV. ECONOMIC EFFECT OF INCREASED COST OF LIVING

When it is conceded by the Railroads in this Arbitration that the rate of wages of Firemen on the same class of engines has been advanced only forty cents a day in twenty-six years, the economic effect of the increase in cost of living upon the Fireman's existence is obvious. While the wage advance to Engineers has been a few cents more per day during a similar period, his wage has not kept pace with his living expenses. We respectfully submit that this increase in cost of living should be given serious consideration by this Board of Arbitration in formulating its Award.

(1) Approximately ten per cent increase in wages, in the aggregate, was secured by Engineers and Firemen in the wage adjustments of 1910. Firemen in Passenger Service and on oil-burning engines were advanced but fifteen cents a day, which advance was granted entirely on account of the increase in cost of living shown to have developed during the period ending with 1909. During the four-year period ending with 1913, a special investigation demonstrates that the cost of living of Engineers, Firemen and Hostlers has increased not much less than \$100 per year, since their last wage increase. In reaching this estimate prices of articles during the winter of 1913-14 were the last investigated and no part of the period included in the present European War was considered.

(2) The purchasing power of a day's wage is of far greater economic importance to the worker in any industry than is the rate of wage. Engineers and Firemen have learned from years of experience that when wage increases have been conceded by Railroads such advances in compensation have already been absorbed by the increase in the prices of meat, groceries, rent, meals and rooms away from home, and other items of living expenses.

Increase in cost of living in twenty-nine Western Towns, Winter of 1909-1910, compared with Winter of 1913-1914.—(*Employes' Ex. 9.*)

Increase in retail prices of principal articles of food in Western cities and towns of the United States and Canada, period of 1909-1913, inclusive.—(*Employes' Ex.* 10.)

Increase in cost of meals and rooms away from home, and increase in cost of house rent, to Engineers and Firemen employed on Western Railroads, period of 1909-1914, inclusive.—(*Employes' Ex.* 15.)

General Increase in Cost of Living.—(*Employes' Witness Jacobs*, p. 956; *Employes' Witness Jones*, p. 870; *Employes' Witness Kearn*s, p. 921; *Employes' Witness Hunt*, p. 1153; *Employes' Witness Hodges*, p. 1344; *Employes' Witness Waddell*, p. 1138; *Employes' Witness Holloway*, p. 1425; *Employes' Witness Johnston*, p. 1099; *Employes' Witness Richardson*, p. 1179.)

Increase in cost of living as basis for increases granted to Firemen in certain service in 1910.—(*Employes' Witness Karn*, p. 6923.)

The more efficient the means of production become, the smaller will be the proportion of all productive effort which is devoted to the creation of necessities. The cost of living will always be high.—(*Henry Pratt Fairchild*—"A Sociological View of the High Cost of Living."—*The Forum*, July, 1914.)

That the loss of real wages within the last five years was about 7 or 8 per cent, and within the last twelve years some 10 per cent. * * *

In years of falling or even slowly rising prices, the American wage worker was able to hold his own or to improve his condition to a slight extent. But when confronted with a rapidly rising price movement, the American wage worker, notwithstanding his strenuous efforts to adjust wages to these new price conditions, notwithstanding all his strikes, boycotts, and riots, notwithstanding all the picturesque I. W. W-ism, new unionism, and the modish sabotage, has been losing surely and not even slowly, so that the sum total of economic progress of this country for the last quarter of a century appears to be a loss of from 10 to 15 per cent in his earning power.—(*I. M. Rubinow*, *President of American Statistical Association*, in "Trend in Real Wages," *American Economic Review*, Dec., 1914.)

Chairman Walsh: "Did you make any study of wages in these industries you examined?"

Miss Tarbell: "Yes, I always did."

Chairman Walsh: "Did you consider the increase of wages as compared with the increase of the cost of living during the same periods?"

Miss Tarbell: "Yes, I always took figures on that."

Chairman Walsh: "What did you observe with regard to the Steel Company in the Pittsburgh District in that respect?"

Miss Tarbell: "I think all the country over, the cost of living has increased faster than wages have increased, and it always does. The cost of living goes up and the workmen have to have that behind them in order to get an increase of wages."

Chairman Walsh: "To what extent did you observe that to be the condition in the Pittsburgh District? To what extent has it increased? It has been stated that the cost of living increased between 1901 and the present time to an extent perhaps of 100 per cent greater than the increase of wages; would that be correct?"

Miss Tarbell: "I think that is putting it pretty steep, but I do not know. I have those figures somewhere, but they are not fresh now in my

mind. There has been an increase in the cost of living, that is the experience, greater than the increase of wages."—(*Ida M. Tarbell, testifying before the Commission on Industrial Relations in New York City on January 19, 1915.*)

Chairman Walsh: "Please explain the relative frequency of strikes at the American Smelting & Refining Company's plant at Perth Amboy. I believe there was one in 1910?"

Mr. Guggenheim: "Yes."

Chairman Walsh: "And another in 1912?"

Mr. Guggenheim: "I do not think these are frequent strikes—to have one in a year or two years, when you consider the difficulties that the laborers have to live under and the high cost of living and there naturally will be discontent, and there is discontent, and I have a very sympathetic feeling for their troubles, for I know they are living under very difficult conditions at the present time. I mean during the last year or two during which time the cost of living has gone up so."

Chairman Walsh: "Would that be your idea—leaving out the word 'frequency'; would that be your idea, that the strikes that have occurred at Perth Amboy were due to the high cost of living?"

Mr. Guggenheim: "I should say that would be the main cause of dissatisfaction and unrest in labor, because the cost of living has advanced so much in the last few years."

Chairman Walsh: "As the result of your observation and experience, would you say that industrial discontent in America is increasing or decreasing?"

Mr. Guggenheim: "I should say that it is increasing and has been increasing for many years, and I am sorry to say I fear it will continue to increase unless things are done to prevent it for the benefit of the laboring classes."

Chairman Walsh: "What is causing this increase of industrial discontent, in your opinion?"

Mr. Guggenheim: "The high cost of living primarily, and next the worst canker the world is suffering from, which is the canker of envy, and when the poor man realizes how much he has to be envious for, it is natural that it will create discontent and to a very great extent. That is the unfortunate thing that prevails throughout the entire human race." —(*Daniel Guggenheim, President, American Smelting & Refining Co., testifying before the Commission on Industrial Relations in New York City on January 21, 1915.*)

In the last ten years the increase in food prices has been from fifty to one hundred per cent.—(*Report Senate Wage Commission, Missouri, February, 1915. Based upon investigation conducted for the Commission by George B. Mangold, Director, School of Economy, Washington University, St. Louis, and by Anne M. Evans, former Special Agent, Federal Bureau of Labor, p. 54.*)

V. REQUISITE QUALIFICATIONS OF LOCOMOTIVE ENGINEERS AND FIREMEN

In no other industry are employes required to possess the extraordinary qualifications demanded by Railroads of Engineers and Firemen, and this is an important factor that should be considered in the fixing of their wage rates.

(1) Applications of Engineers and Firemen for employment are extraordinary in form and detail and the examination conducted in connection therewith most exacting.

(2) The physical examinations of Firemen upon which their employment is dependent is more rigid than that conducted by the Federal Government in the enlistment of soldiers; more extensive and particular than is required of applicants for large insurance policies by insurance companies; and are carried to an extreme unknown in any other form of physical examination.

(3) The repeated visual and aural tests to which Engineers and Firemen are subjected, while maintaining the highest degree of physical efficiency, constantly endangers their employment.

(4) Repeated Mechanical investigations of the technical knowledge acquired by Firemen, and the high standard of technical qualification required of Firemen, makes highly skilled men of them, often years before their promotion to the position of Engineer.

(5) Engineers, before promotion and while yet serving as Firemen, are required by thorough and exhaustive examinations and tests to demonstrate their technical qualifications to serve as Engineer.

(6) Engineers and Firemen who have successfully survived these ordeals are in constant danger of being debarred from employment by

any Railroad because of injuries or other ailments, many of which are truly occupational.

The Railroad rank and file, as today constituted, probably has the best body of men of any commercial enterprise in the world.—(*A. T. Harding, Vice-President, New York Central Lines—Employes' Ex. 53, p. 1.*)

Locomotive Engineers hold an important position as masters of power which control the movement of the commerce of the world. Men holding such positions must necessarily be trained masters of their work, possessing keen judgment and broad talent.—(*Committee Report, Traveling Engineers' Association, 1914—Employes' Ex. 53, p. 4.*)

Men for the position of Fireman should be selected from the best material possible to obtain.—(*Committee Report, Traveling Engineers' Association, 1910—Employes' Ex. 53, p. 7.*)

Form of application for employment as Engineer or Fireman.—(*Employes' Ex. 47, pp. 4-25.*)

Form of physical applications for employment as Engineer or Fireman.—(*Employes' Ex. 47, pp. 27-38.*)

Character of physical and technical qualifications required by Railroads of Firemen.—(*Employes' Witness Martin, p. 1474.*)

Qualifications of Locomotive Engineers and Firemen.—(*Employes' Ex. 45, p. 52; Employes' Witness Cory, pp. 2693-2694.*)

Applicants for employment must be high class men physically and mentally to secure employment in engine service.—(*Employes' Witness DeGuire, p. 2761; Employes' Ex. 47, p. 5.*)

Applicants for employment must be in excellent physical condition.—(*Employes' Witness DeGuire, p. 2777.*)

Firemen required to pass examinations at time of entering service and at end of first, second, and fourth year of service relative to train rules and mechanical knowledge.—(*Employes' Witness Martin, pp. 1474-1475.*)

Requirements relative to technical knowledge, etc., becoming stricter.—(*Employes' Witness Martin, p. 1480.*)

Engineers and Firemen required to undergo a re-examination on color sense, sight and hearing every four years.—(*Employes' Ex. 47, p. 28.*)

Firemen will be discharged if unable to pass Physical examination at time of promotion.—(*Employes' Witness DeGuire, pp. 2781-2782.*)

Every three years Engineers and Firemen must pass eyesight and hearing test, and at the end of fourth year's service Firemen failing to pass eyesight examination were taken out of service.—(*Employes' Witness Martin, pp. 1476-1477.*)

Physical disabilities preclude employment in engine service.—(*Employes' Ex. 47, p. 39.*)

Rules relative to height and weight becoming stricter.—(*Employes' Witness Martin, p. 1491.*)

VI. OCCUPATIONAL HAZARD OF LOCOMOTIVE ENGINEERS AND FIREMEN

The Occupational hazard of Locomotive Engineers and Firemen is of such high degree that special consideration should be given to such hazard in the fixing of wage rates.

(1) Almost one-half of all deaths of members of the Brotherhood of Locomotive Firemen and Enginemen are the direct result of railway accidents. Of 1,224 members who became physically disabled, during the ten years ending December 31, 1913, 544 of such disabilities were amputations of hands or feet. In no other occupation, it is believed, will the hazard of employment be shown as great.

Proportion of deaths and disabilities caused by Railway accidents.—
(*Employes' Ex.* 42, p. 1.)

The hazard of the Firemen's occupation is, by the preceding table, shown to be about 90 per cent above the average of the persons accepted by the larger American life insurance companies.—(*Employes' Ex.* 44, p. 3.)

The occupational hazard of Locomotive Engineers and Firemen.—
(*Employes' Ex.* 45.)

Many cases of gradual blindness or failure of the optic nerve among firemen due to effect upon the eye of heat and light of the fire-box.—
(*Employes' Witness Cory*, p. 2687.)

Out of fifty-nine claims paid by the Brotherhood of Locomotive Firemen and Enginemen in 1912, account of blindness, 13½ per cent were due to excessive light and heat of fire-box.—(*Employes' Witness Cory*, p. 2698.)

(2) Scientific investigations have reported the occupational hazard of the Locomotive Engineer to be far greater than in many other industries.

The hazard of the Engineer's occupation is shown by the preceding table to be about 60 per cent above the average of persons accepted by the larger American life insurance companies.—(*Employes' Ex.* 43, p. 3.)

Records of the insurance department of the Brotherhood of Locomotive Engineers shows that one-third of their members die by accidents.—(*Employes' Ex.* 43, p. 8.)

(3) Insurance of Engineers and Firemen by many old line companies and fraternal societies is prohibited, and where not prohibited the rates are usually far in advance of normal rates.

A comparison of rates and insurance benefits.—(*Employes' Ex.* 46.)

Some of the companies refuse entirely to accept Firemen while others accept them under certain restrictions. The New York Life Insurance Company, for instance, in its circular of instructions to agents (Form 1519, issued May, 1912,) says: Locomotive Engineers must have eight years added to their actual age and may receive no cheaper policy than a twenty-year endowment. Locomotive Firemen must have twelve years added to their actual age and may receive no cheaper policy than a twenty-year endowment.—(*Employes' Ex.* 44, p. 6.)

VII. INCREASED WORK AND PRODUCTIVE EFFICIENCY OF LOCOMOTIVE ENGINEERS AND FIREMEN.

During recent years the Western Railroads have made extraordinary gains in operating efficiency. By the installation of locomotives of greater tractive power and cars of greater capacity, by the addition of a greater number of cars to freight and passenger trains, by the elimination of curves and the reduction of grades, and also by the strengthening of roadbed and structures, remarkable increases in freight train loads have been accomplished, and it has been possible to move a constantly increasing volume of traffic, or of ton and passenger miles, with a comparatively small increase in locomotive or train miles. These developments have been attended by a three-fold effect upon Engineers and Firemen:

Increased Work and Productive Efficiency of Locomotive Engineers and Firemen, 1890-1914.—(*Employes' Ex. Nos. 21, 22, 23, 24.*)

(1) There has been a marked increase in their labors and responsibilities. The Fireman has had more arduous physical work to perform because of the necessity on coal-burning Railroads of handling more fuel for each locomotive-mile traveled. Measured by this standard, the sworn annual statements of Western Railroads to the Interstate Commerce Commission show that the work of Firemen on coal-burning locomotives increased from 52 per cent to 162 per cent, according to Railroads, during the period 1890-1913, and from 34 per cent to 118 per cent during the period 1900-1913. The Engineer has found it necessary to operate a larger and more complicated mechanism and has had his duties increased by the responsibility of looking after a much heavier train.

Trains heavier and longer and harder to handle since 1910.—(*Employes' Witness Abrams, p. 1270.*)

It takes a great deal more care and judgment in handling a 3,000-ton train, or a 2,900-ton train than it did an 1,800- or 1,900-ton train, in order to keep the trains together and keep from damaging the equipment.—(*Employes' Witness Hodges, pp. 1343-1344.*)

It requires a great deal more attention and skill to handle longer trains, in starting the train, so that every car starts one at a time, in order to avoid damaging draft gear, and more skill and care must be used in stopping, in order to avoid breaking in two. In switching and looking for signals, the man who is giving the signal is usually further away.—(*Employes' Witness Richardson*, p. 1175.)

Work of an Engineer before leaving and in handling his train on road has materially increased during the past few years.—(*Employes' Witness Kearns*, p. 924.)

Longer time required to get over road with the longer trains since 1910 than with the shorter trains prior to 1910.—(*Employes' Witness Richardson*, p. 1173.)

Hours of service have increased because of installation of heavier power, and adhering more strictly to full tonnage of engines.—(*Employes' Witness Belding*, p. 1202.)

Within recent years, the increase of tonnage on same engines as were used in past years, has lengthened the hours of service, and has caused the Fireman to shovel more coal.—(*Employes' Witness Ralston*, pp. 1548-1549.)

By heavier loading of trains in drag freight service hours on road have been increased. On the district where I have been working Engineers have been tied up twice under the law in making a trip between Ellis and Salina, a distance of 117 miles.—(*Employes' Witness Young*, p. 1323.)

(2) The Productive Efficiency of Engineers and Firemen, or, in other words, the volume of traffic handled per Engineer and Fireman, has been greatly increased. This is apparent from a comparison of the number of ton miles or traffic units transported by Engine Crews at the present time as contrasted with former years. Measured on the basis of each \$1,000 compensation paid Engineers and Firemen, the Freight Engineers on twenty-four representative Western Railroads, considered as one system, in 1913 handled 92 per cent more ton miles than in 1890, and the Freight Firemen, for each \$1,000 paid them, transported 83 per cent more freight traffic in 1913 than in the year 1890. Considering both freight and passenger traffic together, the Engineers and Firemen employed by these representative Western Railroads, on a very conservative basis of calculation, which grants every advantage to the Railroads, for each \$1,000 paid, hauled a volume of combined freight and passenger traffic from 40 per cent to 50 per cent greater in 1913 than in 1890. On individual Railroads the gains made in Productive Efficiency in many cases were even more remarkable than those mentioned above.

Since the year 1900, the same extraordinary advances in operating efficiency and productivity of Engine Crews have been apparent. For ten representative and leading Western Railroads, considered as

one operating system, the increased Productive Efficiency of Freight Engineers, as measured by each \$1,000 compensation, was 27 per cent more in 1913 than in 1900, and for Freight Firemen was 24 per cent greater in 1913 than 1900. If the comparison as to Productive Efficiency of Engineers and Firemen be further restricted to the period 1909-1913, gains in output for this limited period, corresponding to the larger showing for the more extended period of time, are also apparent.

The point of greatest significance, however, in any discussion of Productive Efficiency, for any period of time, does not rest merely upon the comparison of how many ton miles, passenger miles, or traffic units are handled at the present time as compared with a former year for each \$1,000 paid Locomotive Engineers and Firemen, but is primarily to be found in the increase in the volume of traffic handled by Engineers and Firemen now as compared with some past year on the basis of each additional \$1,000 in compensation paid to them by the Railroads. When the gains from the Productive Efficiency of Engineers and Firemen are considered from this point of view, which is the only real and true basis of measurement, the results attained have been even more remarkable than when measured on the basis of each \$1,000 paid to Enginemen. During the past five years alone, or, from 1909-1913, a very pronounced advance in output has been made by Engineers and Firemen, from a minimum of 11 per cent, as shown by the Great Northern Railway, to 1,037 per cent, as shown by the Northern Pacific Railway.

It is settled that heavier engines should take a higher rate. The bigger the engine, the bigger the train, when you have the business to produce the train.—(*Railroads' Witness Trenholm*, pp. 5300-5301.)

Six Firemen are now doing what was required of ten Firemen before the introduction of heavier power.—(*Employees' Witness Sexton*, p. 1637.)

Tonnage rating westbound is now 2,800 tons as compared with only 1,800 tons in 1910; eastbound in 1910 was only 1,900 tons as against 2,900 at present time.—(*Employees' Witness Hodges*, p. 1343.)

For twenty-six trips, recently, the company got 8,192 more tons of freight handled than it did for thirty-one trips in 1910.—(*Employees' Witness Waddell*, p. 1149.)

In 1910, tonnage west was 1,260 as against 1,850 at present; eastbound tonnage increased from 1,850 in 1910 to 2,600 at present time. This was brought about by use of heavier power.—(*Employees' Witness Belting*, p. 1202.)

One Fireman is now hauling two and a half times the tons of traffic he formerly did.—(*Employees' Witness Livesay*, pp. 1773-1774.)

There has been an increase of tonnage rating of 60 per cent by the introduction of heavier engines.—(*Employees' Witness Richardson*, p. 1172.)

The greatest economies have been secured by increasing the number of tons hauled per train, and by increasing the amount of traffic handled in proportion to the number of men employed. The extent to which, in their efforts to handle traffic economically, the railways of the United States have increased their trainloads is indicated by the fact that the average number of tons per train in this country in 1890 was 175; in 1900, 271, and in 1910, 380. In the region of heaviest traffic, that comprising in general the States of New York, Pennsylvania, New Jersey, Delaware, and Maryland, the average number of tons per train increased from 218 in 1890 to 502 in 1910. On some lines the average trainload exceeds 1,100 tons; trainloads of minerals ranging from 3,000 to 5,000 tons are not uncommon, and sometimes a train has as many as 6,000 tons. These heavy increases in trainloads have been effected very largely by increasing the capacity of cars and their loading, and by increasing the number of cars in a train. The average capacity of a freight car in this country increased from twenty-eight tons in 1902 to thirty-six tons in 1910. Loaded freight trains often contain fifty to seventy-five cars, and trains containing even larger numbers of empty cars and exceeding a half mile in length are run not infrequently in some parts of the country.—(*Bureau of Railway Economics, Bulletin No. 53, p. 10.*)

(3) This increased productivity has been attended by a decrease in costs to the Railroads, in terms of wage payments to Engineers and Firemen for each unit of traffic handled, or, in other words, it has cost the Railroads less in outlay to Engineers and Firemen to transport ton miles and passenger miles. During the period 1890-1913, the ratio of the cost of Engineers and Firemen to total operating expenses for twenty-four representative Western Railroads, considered as one system, declined from 9.89 to 8.06, while the proportion of operating revenues absorbed by wage payments to Locomotive Engineers and Firemen fell from 3.94 per cent in 1890 to 3.30 per cent in 1913. During this same period the outlay in terms of Engineers and Firemen for each 1,000 ton miles handled by these twenty-four representative Western Railroads declined from 65.2 cents to 32.1 cents, or, in other words, each 1,000 ton miles handled costs 33.1 cents less in wages to Engineers and Firemen in 1913 than in 1890. Similar tendencies as to reduction in cost in terms of compensation to Engineers and Firemen are characteristic of the more recent periods 1900-1913, and 1909-1913. As operating efficiency has been developed and as there has been a tendency to approach the maximum in the way of heavy train loads and the use of larger cars and heavier engines with greater tractive power, the decline in operating costs has been, as might be expected, proportionately smaller.

Increased Operating Costs Have Not Been Due Primarily to Wage Payments to Engineers and Firemen.—(*Employes' Ex. Nos. 31, 32, 33 and 34.*)

(4) On the other hand, as the introduction of engines of greater tractive power, which are able to haul a larger amount of traffic than

those which they superseded, has increased, the field for employment of Engineers and Firemen has been limited, and the opportunities for promotion have been restricted. It is apparent, of course, that with an expansion of business and industry that there may be an increase in the number of Engineers and Firemen required even under the new conditions. The development of new traffic, however, has not appeared to counteract the tendency towards the restriction of employment and promotion brought about by the installation of heavier power and the development of greater train loads. The earning capacity of Engineers and Firemen, even at higher rates of pay, has declined, as compared with the period before the heavy engines were installed. They cannot within a certain period, as a month, make the same mileage as formerly.

Increased tonnage has reduced earnings and reduced working force of Firemen 60 per cent.—(*Employes' Witness Rose*, pp. 1512-1513.)

Less demand for Engineers and Firemen and promotion slower since tonnage of trains has been increased.—(*Employes' Witness Ralston*, p. 1551.)

With large engines and heavy tonnage the force of Engineers and Firemen required to do the same work is much less.—(*Employes' Witness Kane*, pp. 1576-1578.)

The heavier the drag, the slower the speed, and reduction of speed of trains from more to less than ten hours, is an actual reduction in the earnings of Firemen.—(*Employes' Witness Vance*, pp. 1746-1747; *Employes' Witness Jacoby*, pp. 1788-1789.)

Because the prospect of promotion from Fireman to Engineer has become more remote on account of increased tonnage, Firemen should have additional wages to compensate for this loss.—(*Employes' Witness Hicks*, p. 1764.)

Heavy power and increased tonnage have caused Engineers to be put back to firing and Firemen to be dropped.—(*Employes' Witness Bloom*, p. 1287; *Employes' Witness Jacoby*, pp. 1788-1789.)

Almost one-third of the Engineers and Firemen were taken out of service on the M. K. and T. by the introduction of big engines, which hauled the same amount of tonnage.—(*Employes' Witness Laherty*, p. 6616.)

We are handling the same trains out of there today with five engines and one train crew that we handled some years ago with nine engines and three train crews.—(*Employes' Witness Jones*, p. 864.)

(5) In their annual reports to stockholders during recent years, Railroad Executives have commented in detail upon the development of greater freight train loads, the handling of a larger volume of traffic with fewer locomotive and train miles, and the decrease in labor and general operating expenses which have been thus secured. Their

statements fully corroborate the claims of the Locomotive Engineers and Firemen as set forth in the present Proceedings.

In order to meet the continued demand for more and better service and facilities, the company has in past years expended very large sums in the reduction of grades and curvature, for more and larger side and passing tracks, heavier locomotives and larger equipment, whereby the trainload has been very greatly increased. * * * In 1912, substantially twice the volume of freight business was handled, with nearly 10 per cent less of freight train miles run to move it. * * * the average number of revenue tons per train mile increased from 200.43 in 1901 to 437.75 in 1912, or an increase of 118.4 per cent. The average number of tons per loaded car mile increased from 12.50 in 1901 to 18.2 in 1912, or an increase of 45.6 per cent.—(*C. B. & Q. R. R., Annual Report of President Miller for 1912, p. 13.*)

As compared with four years ago, the train mileage has decreased 22.05 per cent, while at the same time, there were increases in tons per train mile of 58.72 per cent, in freight revenue 31.76 per cent, and in revenue per train mile 68.72 per cent. * * * The amount saved by the reduced freight train mileage in 1913 from that of 1909, is, in round figures, \$673,000.—(*Chicago Great Western, Annual Report for 1913, p. 13—Employees' Ex. No. 26.*)

(6) It is clear also that the development in the Productive Efficiency of Locomotive Engineers and Firemen employed on Western Railroads has not reached its maximum. This is shown conclusively by a series of interviews with Railroad presidents, which were published in the Railway Age Gazette in its issue of April 10, 1914. With one exception, they all stated that they believed there would be further increases in the weight of freight train loads on their Railroads. The realization of this prospect will obviously mean more work and responsibilities for Engineers and Firemen and further increases in their productivity.

I do not feel that we have yet reached the limit of our trainload, and hope that it will substantially increase during the next five-year period.—(*Darius Miller, Chicago, Burlington & Quincy.*)

There is no reason why we will not increase the Northwestern load at least seventy-five tons in the next five years, and, perhaps, more.—(*W. A. Gardner, Chicago & North Western.*)

On the Rock Island there is still opportunity for a considerable increase in the revenue trainload from that obtained in 1913. I believe that the increase between 1913 and 1918 will be at least equal to that in the last five years, but this will depend largely upon the ability of the company to finance grade revision work.—(*H. U. Mudge, Chicago, Rock Island & Pacific.*)

I think it is a fact that the average tractive force of engines in service is capable of permitting a very considerable increase in trainload for some years to come.—(*C. H. Markham, Illinois Central.*)

In my judgment, there is reason to expect a gradual improvement in the revenue trainload on the lines of this company in common with

Railroads generally. Under existing conditions it may amount, in the next few years, to some such figure as 20 or 25 per cent; in more favorable circumstances it might be greater.—(*L. F. Lorce, Kansas City Southern.*)

The increase in revenue trainload during the next five years will depend largely upon our ability to replace the light engines with heavier power. Our plan is to replace all the main and heavy traffic lines of the Missouri, Kansas & Texas with heavy rail and heavier engines, and I think we ought to secure a 15 or 20 per cent increase in the revenue trainload before 1918. Should there be a substantial increase in the northbound business our trainload might increase 30 or 40 per cent.—(*C. E. Schaff, Missouri, Kansas & Texas.*)

It is my belief that the St. Louis Southwestern has still opportunity for a considerable increase in revenue trainload.—(*F. H. Britton, St. Louis Southwestern.*)

I anticipate that the tonnage load in the next five years will increase between 10 and 15 per cent. In the last six months gross tonnage per train has increased 20 per cent.—(*E. T. Kearney, Texas & Pacific.*)

There is still opportunity to increase the revenue trainload on the Wabash, and as the record shows a consistent increase the past ten years, it is reasonable to suppose that the improvement will continue.—(*Henry Miller, Wabash—Employees' Ex. No. 27.*)

(7) The development of operating efficiency by Western Railroads obviously has for its primary purpose the reduction of operating costs per unit of traffic and the establishment of a larger margin of profit or net gain to the transportation companies.

The ultimate cost units in conducting transportation are the ton mile and the passenger mile. The increasing of the freight train or the passenger train load may be attended with some elements of greater expense, but the larger amount of revenue received from the greater number of passengers and the increased amount of freight in a train is sufficient to cover the additional costs necessary and still leave a margin of profit or net revenue gain. Carried to its last analysis, this method of economical operation results in a lower cost of transportation per ton mile and per passenger mile.

Detailed exhibits have been presented to show the revenue gains arising from the development of operating efficiency on Western Railroads as a whole as well as from the increased work and Productive Efficiency of Locomotive Engineers and Firemen. By way of illustration, during the period 1890-1913, on twenty-four representative Western Railroads, considered as one system, the revenue gains brought about by increased operating efficiency were sufficient to offset all added costs of operation, whether arising from Engineers and Firemen or other items of operating expense, and still leave a net gain in operating revenue, over and above all increased costs, of 26.87

cents per revenue train mile. The increased Productive Efficiency of labor and capital employed on these twenty-four Railroads, in other words, not only reimbursed the companies for additional cost incurred but also yielded a very handsome profit. Similar results were obtained through the development of operating efficiency and increased work by employes during the period 1900-1913.

Larger engine and increased trainload has enabled the Railroads to save something from their gross receipts, and "may have increased their net profit." * * * It does not secure business, but "enables you to handle what you have a little cheaper." Also requires fewer men to handle any certain volume of business.—(*Railroads' Witness Trenholm*, p. 5523.)

One Fireman is approximately earning today for the North Western Railroad, because of increased train tonnage, as much as four Firemen formerly did on the smaller engines.—(*Employes' Witness Rose*, p. 1514.)

A larger number of cars to a train and an increase in train tonnage, means more revenue to the Railroad, provided the tonnage hauled is revenue tonnage.—(*Railroad Witness Higgins*, p. 4761.)

Revenue Gains Arising from Increased Work and Productive Efficiency of Locomotive Engineers and Firemen.—(*Employes' Ex. Nos.* 28, 29, 30.)

(8) There is no doubt, and it has been freely acknowledged and repeatedly stated, that the growth of the large revenue gains discussed in the preceding section have been in part due to additional capital investment in Western Railroads which should receive a liberal return for its use and the risk involved. A complete analysis of the increased operating efficiency of Western Railroads, therefore, brings up the question as to whether the revenue gains, which have resulted from the additional capital investments, managerial ability, and the increased work and productivity of Engineers and Firemen and other employes, have been sufficient, after meeting the advances in operating costs, to pay a fair remuneration to additional capital investment and leave a surplus over and above all these outlays for increased compensation to Locomotive Engineers and Firemen.

A study of the financial and operating performance of Western Railroads during the past five years brings an unequivocal and affirmative answer to this question. An analysis of the operating and financial performance of forty-three representative Western Railroads, considered as one system, during the period 1909-1913, showed that after the payment of all increases in costs of operation, and after allowing interest at 4 per cent per annum for expenditures for additional property during the same period, that there was a balance remaining to compensate the increased Productive Efficiency of Locomotive Engi-

neers and Firemen and other labor of \$50,541,129. If a return of 4 per cent be considered too small, in the light of the present conditions affecting the supply of capital, and 5 per cent be allowed to added capital investment during this period, including the additions made from income, there would still remain \$34,629,574 available for the compensation of increased Productive Efficiency on the part of Locomotive Engineers and Firemen and other labor. These gains are now contained in the accumulated surplus and other assets of the Railroads, and Locomotive Engineers and Firemen are entitled to a further participation in these gains because of their efficiency and because of their increased work, duties and responsibilities.

Revenue Gains Available for the Increased Compensation of Locomotive Engineers and Firemen.—(*Employes' Ex. 39, pp. 1-8.*)

(9) In addition to the amounts, as stated above, which are now shown to be available, according to the sworn statements of the Railroads to the Interstate Commerce Commission, for the remuneration of the increased work and Productive Efficiency of Locomotive Engineers and Firemen, additional sums amounting to hundreds of millions of dollars would also be available at the present time, had the finances of the Western Railroads been wisely and properly managed. A review of the past history of Western Railroads, in general, discloses the fact, however, that the extraordinary gains in revenue—which have arisen from the bounty of the Federal and State Governments, the populating of the country, the development of trade and industry, the adoption of mechanical devices and improved operating methods, added capital investments, and the increasing work and efficiency of employes—have to a large degree been absorbed by fictitious capitalization, or dissipated by improper or misguided financial management.

(a) During the twenty years following 1850, the Federal Government, together with the State of Texas, made land grants to Western Railroads to aid in their construction, to the amount of 305,114 square miles. This is equivalent, approximately, to all the area East of the Mississippi River and North of the Ohio and Potomac Rivers, with the exception only of the States of Wisconsin and Michigan. The unfortunate feature of this land grant policy was that these great subsidies were diverted from their original purposes to the enrichment of a few financial adventurers. A number of Western Railroads, such as the so-called Pacific Lines, were built in a spirit of financial corruption, by collusive construction contracts, stock manipulation, excess capitalization, and the

defrauding of the Government and the public. The value of the extensive areas of lands granted, were capitalized and distributed in the form of securities to the stockholders. In other instances, the value or income-producing power of the land was capitalized. A few Railroads, such as the Northern and Southern Pacifics, and the Atchison, Topeka and Santa Fe, retained very valuable holdings of timber and minerals, despite the stipulations that such lands be sold to settlers in small tracts. They are now among the unreported assets of these transportation companies. The Southern Pacific Company, alone, is now estimated to have oil and timber holdings ranging in value from \$100,000,000 to \$700,000,000, which are reported to the Interstate Commerce Commission at a book value of slightly more than \$40,000,000.

Land Grants to Western Railroads.—(*Employes' Ex.* 58.)

(b) During the years following the construction of the Western Railroads through Government aid, and extending into the early nineties, the greater number were characterized by financial managements, which either dissipated their resources in the form of special distributions to stockholders, or by stock manipulations, or, capitalized cumulatively the expansion of trade and business, and gains in operating efficiency, together with the added net revenues produced by the increased work and Productive Efficiency of Locomotive Engineers and Firemen. The hundreds of millions of dollars of fictitious capital issued during this period served to absorb and conceal the increases in operating revenues, and, not only constitute a present drain upon the operating performance of the transportation companies, but will continue in the future to absorb revenue, a portion of which should be available for the added compensation of Locomotive Engineers and Firemen.

Financial Management and History of Western Railroads.—(*Employes' Ex.* 61, pp. 182-186, 221, 244-250, 258-263, 276-283, 302-306, 340-350; *Employes' Ex.* 62, pp. 3-14.)

(c) After the panic of 1893, and the reorganization of a number of Western Railroads, which had been forced into the hands of receivers by that financial catastrophe, a tendency towards the consolidation of independent lines into large systems became very pronounced. The movement progressed so rapidly that at the present time a comparatively few independent Railroads control the entire Western transportation industry. Of the ninety-eight Railroads engaged in the present Arbitration, practically eighty

are controlled by thirteen independent, proprietary systems. A few bankers, by their control of the avenues of credit and the market for the sale of securities, by becoming reorganization managers of certain Railroads and forming voting trusts, by acting as fiscal agents, and by the purchase of stock, have finally secured control of the Western Railroad situation. These banking institutions are, in turn, through interlocking directorates and stock ownership, controlled by two distinct financial groups—the Morgan group and the Rockefeller group. It truly may be said, therefore, the Morgan and Rockefeller interests dominate the entire Western Railroad situation. The significance of this concentration of financial control upon the economic interest and advancement of Locomotive Engineers and Firemen and other employes has a two-fold aspect: the potential control of working conditions and compensation of employes, as well as their general economic welfare and progress, is in the hands of these two groups of affiliated banking interests, and railway presidents are made and unmade by these dominating financial interests, and the fundamental policy required of them is to develop as large an earning power as possible in order to produce market values for securities and to pay dividends on securities which have been issued without actual investment or additions to the earning value of the properties.

Concentration of Financial Control of Western Railroads.—(*Employes' Ex.* 59, pp. 38, 61-62, 89-91; *Employes' Ex.* 60.)

(d) As a result of the methods of financing or selling securities developed under this banking control of Western Railroads, large discounts and commissions have been paid which have been without justification. By way of illustration, the recent investigation of the St. Louis and San Francisco Railroad by the Interstate Commerce Commission disclosed the fact that discounts and securities were paid to banks and syndicates which aggregated the enormous total of \$32,152,602 during the period 1896-1913. Enormous bonuses to stockholders have also been granted during this same period of years. More than \$250,000,000 was distributed in this way during the period 1900-1910 by eight representative Western Railroads alone. By the sale of securities at much less than their prevailing market prices, these companies were obviously deprived of cash resources which they should have had, and at the same time issued excess capitalization which became a drain upon operating revenue. If it had not been for these practices, the financial status of the Railroads, which are parties to the present Proceedings, would be much more satisfactory, and much greater amounts

of surplus revenues would be available for the increased compensation of Locomotive Engineers and Firemen and other employes, and for other legitimate purposes.

Bankers' Commissions, Underwriting Commissions and Stock Bonuses.
—(*Employes' Ex.* 59, pp. 7-10; *Employes' Ex.* 61, pp. 1-71, 127-153, 199, 264, 269; *Employes' Ex.* 62, p. 45.)

(e) Recent Railroad reorganizations have also been made the basis for the flotation of immense amounts of fictitious securities which have actually absorbed existing revenue, through unwarranted dividend and interest requirements, or will be made the basis for the absorption of future revenue gains arising in part from the additional work imposed upon Engineers and Firemen and from their increased productivity. The reorganization of the Atchison, Topeka and Santa Fe Railway in 1896 affords a striking example of these activities. As the result of this reorganization, the Atchison stock issues were inflated, without adding anything to the value of the property or to its earning capacity, to the amount of \$166,093,095. More than \$112,000,000 has already been paid in dividends upon these fictitious securities which constitute a liability against the property but do not represent any contribution ever made in any way to its earning capacity. The annual dividends now paid upon these stock issues amount to \$9,167,456. This amount is considerably more than double the total annual outlay now made by the Atchison to its Locomotive Engineers and Firemen. Similar instances of the inflation of securities have been characteristic of the consolidation and reorganization, during recent years, of other Western Railroad properties.

Financial Management and History of Western Railroads.—(*Employes' Ex.* 61, pp. 73-77, 188-192, 198-216.)

(f) An indication of the extent to which the financial condition of Western Railroads has been adversely affected by financial mismanagement, and a startling illustration of the absorption of revenue gains produced by operating efficiency and increased work and output of Locomotive Engineers and Firemen and other employes has been afforded by an analysis of the dividend disbursements of only fourteen companies during the past fiscal year—a subnormal period of industrial depression. These companies alone were found to have paid dividends in 1914 on fictitious stock issues amounting to \$43,167,599. This does not account by any means for all of the excess stock of Western Railroads which are engaged in these Proceedings, but only for a number of representa-

tive and illustrative cases. A comprehensive estimate would also have to take fictitious bond issues into consideration. If the future outlook were also considered, hundreds of millions of dollars of fictitious capitalization would be discovered which has not as yet received remuneration but which may become a drain upon operating revenues.

Idem.—(*Employes' Ex.* 62, pp. 57-60.)

(10) The claim has been made by the Railroads that the development of operating and Productive Efficiency has not been attended with "profits." This statement loses its significance, however, when it is recalled that the fiscal year 1910, was an unusually prosperous year, and the fiscal year 1914, was one of opposite characteristics, being marked by an industrial depression, and a marked decline in the volume of trade of all kinds, and Railroad traffic. Manifestly, no significance as to the profits arising from increased Productive Efficiency can be attached to the comparison submitted by the Railroads of a very prosperous year, as 1910, with a recent year of depression as 1914, or with current conditions of depression, in order to show a decline in gross or net operating revenues of Western Railroads. Such a comparison is untenable because it obviously attempts to compare the incomparable—a volume of traffic above normal with a volume of traffic below normal. It should also be recalled in this connection that in determining whether Productive Efficiency has yielded an adequate return on additional property investment since 1910, the character of the capital investment made during the past four years should be taken into consideration in order to determine whether these outlays have been of such a description as to be immediately productive, or on which a longer time may be necessary to expect a full return than has elapsed to date. It would appear that the Railroads, although they have received profitable returns, should not expect immediately a full return on their capital commitments made since 1910. It should also be noted that errors were made in the compilation of Railroad Exhibit Number 6, which require the reduction in the increased capital outlay since 1910, as stated therein, by more than \$40,000,000, or, in other words, at 5 per cent return per annum, \$2,000,000 less each year would be required to remunerate additional capital outlay than is indicated by this exhibit.

Expenditures for Property by Western Railroads, 1910-1914.—(*Employes' Ex.* Nos. 80, 81.)

(11) If the Railroads contend that the Productive Efficiency of Engineers and Firemen has not resulted in profits because it has not

provided interest and dividend payments upon outstanding capitalization, they should be required to prove that the financial management of the Railroads has been acceptable and beyond reproach. Enginemen have no control of operating or managerial efficiency and should not be expected to bear the burden of operating inefficiency or financial mismanagement. The determination as to the degree of participation to be accorded them should, therefore, be based on locomotive or train mile costs and revenue gains. On this basis, Locomotive Engineers and Firemen have an opportunity to demonstrate their increased work and productivity. By this standard, it is at once evident from the testimony submitted that the labors and responsibilities of Enginemen have increased, that their productivity, in terms of units of transportation, has rapidly advanced, and that their cost to the Railroads in terms of units of transportation has declined, leaving large revenue gains available for their increased compensation.

VIII. FINANCIAL ABILITY OF WESTERN RAILROADS TO PAY INCREASED WAGES TO THEIR LOCOMOTIVE ENGINEERS, FIREMEN AND HOSTLERS.

Despite the financial mismanagement and dissipation of resources, which has characterized the past history of a number of Western Railroads, they are still able to pay higher wages. If the administration of these finances in past years had been proper, they would have been in a much stronger financial position at present. As it is, however, they are fully able to pay additional compensation to Locomotive Engineers, Firemen and Hostlers. The reasons which are the foundation of this statement are, briefly, as follows:

(1) The combined accumulated surplus of forty-three leading Western Railroads, which are parties to the present Proceedings, amounted, on June 30, 1914, to \$625,895,415.

Condensed Income and Profit and Loss Statements of Western Railroads.—(*Employes' Ex. Nos. 64, 65.*)

(2) The actual cash on hand or in bank reported by the Western Railroads engaged in the present Proceedings amounted, on June 30, 1914, to \$208,278,196.

Financial Condition of Western Railroads in 1914.—(*Employes' Ex. 66.*)

(3) Thirteen independent Railroads practically own or control the other Railroads which are parties to these Proceedings. These thirteen proprietary companies on June 30, 1914, had an accumulated surplus of \$440,812,500, and cash on hand amounting to \$109,101,107.

Financial Conditions in 1914 of Western Proprietary Railroads.—(*Employes' Ex. Nos. 59, 66.*)

(4) Larger dividends were disbursed by Western Railroads in 1914 than in 1913 or 1910. There were no dividend or interest curtail-

ments by Western Railroads in 1914, the finances of which had been properly and conservatively managed in the past.

Dividend payments by Western Railroads in 1914.—(*Employes' Ex.* 70.)

(5) A number of Railroads in the West in 1914 showed a deficit in current income after the payment of operating expenses and capital charges. Eliminating those Railroads which had been dangerously weakened by financial mismanagement and those which are subsidiaries of prosperous systems, less than one per cent of the total mileage of Western Railroads engaged in the present Proceedings was operated in 1914 at a deficit, after the payment of fixed charges.

Mileage of Western Railroads operated at a deficit in 1914.—(*Employes' Ex.* 72.)

(6) Fifty-three Western Railroads during the fiscal year 1913, the last year for which time was available to make the computation, earned 7.78 per cent on their total capital stock outstanding, whether it had been issued with or without consideration in property or earning values; ten of the leading companies of the West, during the same year, earned 9.66 per cent on their total outstanding capital stock.

Earnings on Outstanding Capital Stock.—(*Employes' Ex.* 61, pp. 8, 23.)

(7) Hidden assets of immense value are in the possession of certain Western Railroads, but do not appear on their books at their real value, such as the timber, oil and mineral lands of the Southern Pacific Company, which have been estimated to have a market value of \$700,000,000, and which are reported with a book value of only slightly more than \$40,000,000; also the timber holdings of the Northern Pacific, and Santa Fe Railroads, which are worth between \$50,000,000 and \$100,000,000, but which are not reported among the assets of these companies.

Hidden Assets of Certain Western Railroads.—(*Employes' Ex.* 58, pp. 18-19.)

(8) So far as any Western Railroads find themselves in a weakened financial condition now as compared with past years, it can almost invariably be traced to the inevitable result of past mismanagement of their finances. No Western Railroad, that had been properly managed and operated, or that had been projected with true economic judgment and foresight, was insolvent during the past fiscal year.

Insolvency of certain Western Railroads due to financial mismanagement.—(*Employes' Ex.* 61.)

IX. THE OUTLOOK FOR THE FUTURE.

The increase in gross and net revenue and net income shown by leading Western Railroads during the period 1909-1914, represents a gain which has been made in the face of conditions highly unfavorable in many respects to general industrial and commercial activity. Significant as are these increases in revenue and income, they cannot be considered as representative of the degree of expansion to be expected in the earning capacity of Western Railroads under favorable conditions with freedom from disturbing influences which have adversely affected practically all branches of trade and industry during the entire period under consideration.

The indications now are that the worst effects of the recent financial and industrial breakdown caused by the European conflict have passed. It is true that, owing to the immense destruction of capital and the demand for it which will arise when the European war terminates, that interest rates and the cost of borrowing capital may be higher. This will be a condition which will have to be faced by all industrial enterprises as well as the Railroads. On the other hand, there are certain foundations for optimism which pertain strictly to Railroads, and which will undoubtedly be the basis of an era of prosperity. A pronounced upward trend is clearly evident in railroad affairs. The reasons for this statement may be briefly summarized as follows:

(1) There has been a favorable change in the attitude of the Federal government, state regulatory authorities, and of the public toward the question of increased freight and passenger rates as well as toward the entire railroad situation.

(2) There has been a marked recovery from the crisis precipitated by the breaking out of the European War, as evidenced by the great expansion in the country's foreign trade which, in a large measure, is the underlying basis of prosperity.

(3) A rapid improvement in business conditions in the United States in 1915 is predicted by men in close touch with the financial and industrial life of the country.

(4) Statements put out by Railroad officials summarizing the results of operations since the close of the fiscal year 1914, indicate that Western Railroads are already feeling the effects of returning prosperity.

(5) A resumption of industrial activity and the restoration of prosperity is indicated by the expansion in the lumber industry in the Southwest and in the Pacific Coast States; in the increased output of copper mines in Michigan, Arizona and Montana; in the resumption of cotton exports on a large scale; and in the primary movement of grain to Chicago and other centers of distribution.

(6) The upward trend in trade and industry which set in during the closing months of 1914, extending to practically all sections of the country, will be influenced by the improved conditions which will follow the resumption of activity in the manufacturing and industrial centers of the Eastern and Southeastern States.

(7) There has been a rapid and steady improvement in the investment market.

(8) The monthly reports of the Western Railroads as to earnings and traffic, clearly indicate a constant upward movement towards normal conditions. A few Railroads show higher revenues now than for the corresponding period last year; the others range from 3 to 10 per cent below normal as compared with a year ago. Practically all indicate, however, a steady progress during the recent months in recovering from the depressed conditions of the late summer and autumn.

Upward trend in trade and transportation conditions and recovery from recent business depression.—(*Employes' Ex.* 82.)

The two decisions in the Eastern rate case, taken as a whole, may be truly said to mark the beginning of a new era for the Railroads.—(*Daniel Willard, President Baltimore & Ohio R. R., New York Times, Jan. 20th, 1915.*)

During the past four months there have occurred four events of great moral importance to the Railroads:

(1) The letter President Wilson sent to a committee of Railroad executives, pointing out that as the one common interest of our whole industrial life, the Railroad situation deserved sympathetic treatment.

(2) Finding by a Committee of Congress that the Railroads are underpaid for carrying the mails.

(3) The overwhelming defeat by popular vote in Missouri of the so-called "extra crew" law.

(4) The decision just rendered in the freight rate case.

As Mr. Rea, President of the Pennsylvania Railroad, has pointed out, this decision distinctly marks the beginning of a broad constructive policy in railroad regulation so imperatively needed. There is, of course, still a long way to go. But we have at least started on a policy of Railroad conservation.—(*Ivy L. Lee, Commercial and Financial Chronicle, Dec. 26, 1914, p. 1872.*)

The decision of the Interstate Commerce Commission is a great step forward in the proper solution of the problem, quite apart from the additional revenues which will accrue under the specific increases authorized.—(*George Stuart Patterson, Solicitor of Pennsylvania R. R.*)

There is less clamor for indiscriminate governmental suits against corporations, and we may reasonably hope that honestly conducted enterprises will hereafter be allowed to carry on their legitimate functions without fear of political or legal harassment.—(*James A. Farrell, President United States Steel Corporation, Commercial and Financial Chronicle, 1914, p. 1873.*)

Houston, Tex., Feb. 1.—There has been a considerable movement of decking out of Port Arthur to British Ports, and there is every indication of a quickening demand in all lines of exporting if the boats could be secured.—(*American Lumberman, Feb. 6, 1915.*)

Bellingham, Wash., Jan. 30.—Demand has been urgent for lumber for shipment to the United Kingdom, France, China, and Australia. Cargo shipping mills of Bellingham, Blaine and Anacortes, representing some of the largest plants on the Pacific Coast, are now in operation in confirmation of the statement that there is a marked improvement in the demand for lumber, especially for foreign shipment.—(*American Lumberman, Feb. 6, 1915.*)

Louisville, Ky., Feb. 5.—A firm in this city has received a \$40,000 harness order from Belgium.

The French Government has called for bids from Seattle lumber dealers for 500,000,000 feet of lumber to rebuild homes destroyed in the war.

The Mesker Bros. Iron Company of St. Louis has received an order for 2,000 field cooking ranges, valued at about \$1,000,000, from the French Government.

A Detroit knitting company has secured contracts for 1,000,000 pairs of army socks for delivery next winter.—(*Financial America, Feb. 6, 1915.*)

The Ford Motor Company, Detroit, announces an order for 40,000 motor cars for shipment to one of the allied nations. It is the largest recorded single order for motor cars and is said to involve \$16,000,000 to \$18,000,000.—(*The Iron Age, January 28, 1915.*)

The year 1915 seems certain to be much better for the business man than 1914, and we should do everything practicable to evidence our faith in future prosperity. There are distinct signs of improvement.—(*Judge Elbert H. Gary, Analyst, January 25, 1915.*)

Farrell, Pa.—James A. Farrell, president of the United States Steel Corporation, is optimistic over industrial conditions and stated in an interview that conditions will improve shortly after the first of the coming year. He said many workmen who have been idle will gradually be given employment, and mills now idle will be started.

Industrial conditions are fast improving and the marketing of the American-made products in the Latin-American countries will boost trade greatly, said Mr. Farrell. By the first of the year many additional men will be placed at work in the mills of the Sharon and Farrell districts. He predicted that industrial conditions would improve soon and that the end of the industrial depression is in sight. He expressed regret over the European conflict, but says it means a greater export business for the United States. He intimated that Europe would not only be compelled to purchase here but that the Latin-American countries would furnish an abundance of business which the United States would hold for a time.—(*The Wall Street Journal*, Dec. 12, 1914.)

The South is not hit as hard by the war as was expected at the beginning. Cotton is selling at 8 cents now and is moving freely. The southern business men are hopeful. Many are predicting that the war will be a blessing to the southerners in the end.—(*President Markham of the Illinois Central*, *Wall Street Journal*, Feb. 3, 1915.)

I look forward to a gradual improvement in general business during the year, which will be reflected in the net earnings of the railways, which in turn will bring general buying and an improvement in the situation as a whole. The Baltimore and Ohio, the Pennsylvania Lines, the New York Central and Santa Fe Railroads, four of the large systems of the country, have entered the steel and car markets already. These are concrete signs of confidence.—(*A. H. Mulliken, President, Pettibone-Mulliken Company, Financial America*.)

W. P. G. Harding, a member of the Federal Reserve Board, states that one of the most encouraging signs of the day is the rapid improvement in general business conditions throughout the south, especially in the cotton states, due largely to the fairly satisfactory resumption of cotton exports.—(*Dry Goods Economist*, January 30, 1915.)

There appears to be a tendency all over the west to discontinue attacks on business and various state legislatures are discussing ways and means to repeal certain stringent measures of the past which have resulted in hampering business. In other words, the desire seems to be to improve conditions commercially and every effort apparently is being exerted in accomplishing this result.

There has been improvement in the lumber business, especially in Idaho, from which state a substantial amount is now moving eastward. I should say the improvement in this industry is greater in that state than in either Oregon or Washington.—(*Frank A. Vanderlip, Journal of Commerce*, Feb. 6, 1915.)

This country is experiencing steady progress toward normal conditions, and I look for a period of prosperity during the next few years.—(*John J. Mitchell, Wall Street Journal*, January 29, 1915.)

The earnings of that portion of the road formerly embracing the mileage of the Iowa Central has contributed to the excellent showing made in surplus revenue, through the large increase in the volume of tonnage movement through Peoria. The revenue from business received and forwarded at the station for the last fiscal year exceeded \$2,000,000 and shows corresponding gains for the entire period from July 1 to Dec. 14. The earnings of the property for the present fiscal year are the greatest in its history, and the net revenue gives promise of exceeding that of the year 1913, when the company earned \$451,000 over and above all charges and taxes. The business appears to be of a permanent char-

acter and gives evidence of continual growth. It is interesting to know that the company handled for the last fiscal year 13,280 carloads of transcontinental business.—(*President Newman Erb, Memphis & St. Louis, Commercial and Financial Chronicle, December 26, 1914.*)

While I do not look for any boom I think that the spring months will bring improved business and better earnings for the railroads in the northwest.—(*J. M. Hannaford, President Northern Pacific, Wall Street Journal, January 20, 1915.*)

The lumber industry is now flourishing, farm machinery is being bought on unprecedented scale, the western general merchandise movement is most encouraging, and banking interests are in excellent condition.—(*President Earling of the Chicago, Milwaukee and St. Paul, Wall Street Journal, Feb. 5, 1915.*)

Chicago—Atchison officials estimate the December increase in gross at \$800,000 and an increase in net of over \$300,000.—(*Wall Street Journal, Jan. 4, 1915.*)

Chicago, Feb. 3.—Atchison loadings for the week ended Jan. 29 showed 21,674 cars on system rails, a gain of 2,331 over the same week last year. There were 5,195 cars received from connecting lines, a loss of 9 cars, making a total of 26,869 cars handled as compared with 24,547 for a year ago, a larger movement by 2,322 cars.—(*Financial America, Feb. 4, 1915.*)

Chicago—The Burlington's loadings increased 17 per cent during the first half of January. Grain loadings gained 40 per cent, stock increased 24 per cent, coal 18 per cent, and miscellaneous freight 10 per cent.—(*Wall Street Journal, Jan. 21, 1915.*)

Chicago—North Western revenue loadings in the first half of January increased nearly 12,000 cars, more than one-third of which was freight from connecting lines. Grain loadings, locally, aggregated 7,500 cars, or an increase of 3,200 cars. Originating livestock, coal, merchandise and miscellaneous freight all showed fair increases, the only decrease having been a couple of hundred cars of lumber whereas other forest products increased 1,500 cars. Ore broke even.—(*The Wall Street Journal, January 21, 1915.*)

New Orleans, February 5.—Shipments of cotton this week from United States ports were the largest on record. They totalled 585,032 bales, of which 483,476 went to foreign countries and 101,556 coastwise. Port stocks tonight amounted to 1,925,674 bales. Foreign exports thus far this season amount to 4,120,257 bales.—(*Houston Post, Feb. 6, 1915.*)

Hugh McElroy says: Big as our exports were last week—482,000 bales against 207,000 last year, or an increase of 123 per cent—the coming week promises to even exceed that comparison. Last (Friday) night there were on shipboard at United States ports awaiting export 492,000 bales against 252,000 a year ago.—(*Wall Street Journal, Feb. 8, 1915.*)

Chicago.—Last week's primary receipts of wheat, corn and oats combined were 18,083,000 bushels against 13,019,000 bushels a year ago. Shipments were 13,980,000 against 9,539,000 last year. Corn receipts increased over 4,000,000 bushels and wheat shipments increased over 2,000,000 bushels.—(*Wall Street Journal, Feb. 8, 1915.*)

Beaumont, Tex., Feb. 1.—The outlook for the lumber trade is getting better every week, said a prominent Beaumont manufacturer today and this opinion seems to be shared by all millmen in this section. Even the wholesalers admit that prices are firmer and that dimensions and shiplap particularly are very scarce and bringing advanced prices. Yard-stock business is still good. Dimension No. 1 and 2 shiplap and six-inch No. 2 are all very scarce and are bringing better prices than they did a week ago. Continued rain of the last week again made it impossible for mills to get their lumber dried.—(*American Lumberman*, Feb. 6, 1915.)

Houghton.—Employees at the Calumet and Hecla mines, mills and smelters, Isle Royale, North Kearsarge, Allouez and Ahmeek go on full time this week. This affects 10,000 men and adds 20 per cent to the output of all these mines. All the producing mines of Lake Superior are now on full time. Close to 2,000,000 pounds of copper will be added to the monthly output.—(*Wall Street Journal*, Feb. 6, 1915.)

Pittsburg, Jan. 5.—The resumption of operation by the Pittsburg Steel Co.'s big plant in Monessen is announced. The plant had been operating only in part for several months. Yesterday it began operating in full, giving employment to 5,000 men.

Leechburg, Pa., Jan. 5.—The West Leechburg Co.'s mill started up in full today after running irregularly for several months. The plant employs 750 men.

Albany, Jan. 5.—The Auburn plant of the International Harvester Co. which has been idle except in certain departments for several months, has begun to increase production and will continue to add to its force each week until the plant is working to its full capacity. About 2,700 employees are busy when the plant is being operated at its full capacity.

Wheeling, W. Va., January 5.—This week will witness the return of several thousand more workmen in the Wheeling district. One thousand employees of the mill of Follansbee Bros. at Follansbee returned to work yesterday morning while the Portland, Ohio, mine of the Pluto Coal Co. will resume operations later in the week. The La Belle Plant of the American Sheet and Tin Plate Co. in this city will resume operations in full next month, giving employment to 950 men.—(*Financial America*, Jan. 6, 1915.)

Newcastle, Pa., Jan. 11.—Nineteen of the twenty hot mills at the Newcastle tin plant resumed this morning. This is an increase of five mills over the number in operation last week.

Every department of the plant resumed in full and 500 men returned to work. Forty-nine of the fifty mills at the two local plants of the American Sheet & Tin Plate were put in operation today after working but part capacity for several months.

The Carnegie steel plant will operate 60 per cent capacity this week. The advance order for steel is 8,000 tons for the week and more orders are expected before the end of the week. The plant has been operating only about 25 per cent for nearly a year.

Monessen, Pa., Jan. 11.—The twenty-five mills and every finishing department included in the thirteen processes necessary to making tin-plate of the American Sheet & Tin Plate Co. here resumed full operations this morning.

Wheeling, W. Va., Jan. 11.—The resumption of more than a dozen mills and factories and the return to work of more than 10,000 men was Wheeling district's contribution to the march of prosperity today. Within

the next two weeks 10,000 more workmen will find employment in the resumption of as many more plants.—(*Financial America*, Jan. 12, 1915.)

Wednesday Evening, Feb. 10, 1915.—The report of the United States Steel Corporation on its unfilled tonnage for January shows a total of 4,248,571 tons, an increase of 411,928 tons for the month. Taken in connection with the increase for January, the Steel corporation has on its books nearly 1,000,000 tons more than it had in November. The January total is the largest the corporation has reported since last April, when the unfilled tonnage was 4,277,068 tons.—(*The Chicago Daily News*, Feb. 11, 1915.)

The Eagle Tannery at Rockford, Michigan, has lately been obliged to increase its manufacturing capacities in order to compete with its fast growing business. The addition is 80x108 feet and is three stories high.

The Middleburg Tannery Company, Middleburg, Pa. is busy putting out many orders and is running at full capacity.

The Standard Leather Company of Brockton has moved to larger quarters at 60 Franklin Street. They are to materially increase their business in the near future.

Busy.—The W. H. McElwain Company is very busy at its Derryfield, N. H., plant. The output is 600 dozen pairs daily and is increasing all the time.—(*Hide & Leather*, January 30, 1915.)

Fall River Iron Works Company's seven cotton mills, employing 7,000, resumed full time operations yesterday.—(*Wall Street Journal*, Jan. 28, 1915.)

Pittsfield, Mass.—It is reported that three of the local woolen mills are working on large orders for uniform cloth for export and that the plants are being operated night and day as far as help can be secured.

Clinton, Mich.—It is reported that the Clinton Woolen Mfg. Co. has never been so rushed in its history as at present. A large order for cloth for the U. S. Government is being worked up.

Tilton, N. H.—It is reported locally that the Tilton Mills will start on a night and day schedule early in January to get out rush orders.

Paterson, N. J.—The Henry Doherty Silk Company reports every loom running full time and orders ahead for several months.

Amsterdam, N. Y.—A great improvement has taken place in the local carpet and rug mills. McClerry, Wallen & Crouse have started up their Axminster department after a shut-down of three weeks, and the Shuttleworth Bros. Company are planning to start up idle machinery.—(*Textile World's Record*, January, 1915.)

The pendulum of trade continues to swing in the direction of improvement. Starting at a very slow pace three weeks ago, it is now moving at a more satisfactory rate, though even yet the movement is but conservatively steady. However, one line after another seems to be throwing off lethargy, cumulative though slight gains are being registered, and it is probable that more business could be done were it not for the fact that many concerns are proceeding on the principle that it is better to have old debts liquidated to a greater extent than to allow buyers to incur fresh obligations on a large scale. Still, fundamental conditions are better than heretofore. Almost everywhere the disposition is to look on the bright side of things, evidence of spring buying, especially of textiles, continues to multiply; the labor situation, while far from normal,

is such that idleness is decreasing; winter weather over a wide area has helped reduce stocks of heavy goods; money is cheaper; commodity prices are higher; funds are plentiful in the cereal growing regions; winter wheat is in good shape; the south is more optimistic because of free sales of cotton from warehouses; copper is higher, and steel mill operations are being increased.—(*Bradstreet's*, January 30, 1915.)

Chicago and North Western.—Kuhn, Loeb & Co. began offering publicly \$10,000,000 Chicago & North Western general mortgage 5 per cent bonds, Friday afternoon at 102½, and had to close the subscription books immediately because of the large amount of advance subscriptions.

Kuhn, Loeb & Co. announce that advance subscriptions for Chicago & North Western general mortgage 5 per cent gold bonds have been so large that the subscription has been closed.

Illinois Central.—Kuhn, Loeb & Co. offered \$5,000,000 Chicago, St. Louis and New Orleans Railway 5 per cent equipment trust certificates guaranteed by the Illinois Central at par and interest yesterday morning and the issue was heavily overapplied for in an hour and the subscription lists closed.—(*Wall Street Journal*, December 12, 1914.)

Immediate absorption by investors of the entire issue of \$49,000,000 of Pennsylvania Railroad 4½ per cent, consolidated (now first) mortgage bonds, which were offered for subscription at 103¾ and interest, was naturally accepted as a significant illustration of the present conditions in the investment market. The fact that the bonds were oversubscribed, and that the quotation for them when dealings commenced at the Stock Exchange advanced to as high as 104⅞, served, indeed, as a basis for the reassertion of confidence in the general securities market. The incident, it may be remarked, has a wide bearing, marking as it does the resumption of the railway financing on a large scale, and the ability and readiness of the investment market to take such issues without the assistance from abroad which in past few years usually constituted an important feature of such operations. Several other bond issues have been readily taken up by the investing public, notably offerings made on behalf of the Lackawanna and the Illinois Central systems.

Current information is that banking interests consider the situation ripe for bringing out additional offerings from companies whose arrangements in connection with the raising of new capital have been heretofore postponed on account of the general financial position. The New York Central Railroad Company is prominently mentioned in this connection, and among the other companies whose negotiations with bankers have apparently not yet been concluded is the Baltimore and Ohio. The existing money market conditions support the idea that the financial public will purchase bonds of good quality with a readiness which was recently lacking, and that the requirements of railways for new capital will now be easily supplied through sales of such securities.—(*Bradstreet's*, February 6, 1915.)

Chicago.—Atchison officials expect March gross to compare about evenly with a year ago. After a rather sharp slump in freight movement the first half of the month traffic again took another turn for the better, passenger receipts for the month will show a fair gain, due to the heavy travel to San Francisco, although a good deal of it was deferred last winter for the exposition, and the last day of February having been Sunday the March total will get around \$200,000 additional, with no expense against that amount. The cause of the recent decline in loading was a heavy storm throughout the West, or a series of miscellaneous

storms, which put country roads in bad condition, making many of them impassable.—(*Wall Street Journal*, March 23, 1915.)

Pittsburgh.—Steel mill operations the past week have averaged 65 per cent of the ingot capacity, nearly double that of last December.—(*Wall Street Journal*, March 22, 1915.)

In the preparation of this Brief and Argument in behalf of the Engineers and Firemen we have been unable to review much of the evidence presented during the more than three months of almost continuous sessions. Perhaps we have not devoted the attention to the evidence presented by the Railroads that its importance deserves. It has been our desire to avoid a prolonged presentation of evidence presented by the Engineers and Firemen.

Respectfully submitted,

W. S. STONE,

W. S. CARTER,

Counsel for Employes.

BEFORE THE
BOARD OF ARBITRATION

ARBITRATION
BETWEEN
THE WESTERN RAILROADS
AND
BROTHERHOOD OF LOCOMOTIVE
ENGINEERS
AND
BROTHERHOOD OF LOCOMOTIVE
FIREMEN AND ENGINEMEN.

Pursuant to Arbitration
Agreement dated August 3,
1914.

Under the Act of Congress
Approved July 15, 1913.

BRIEF ON BEHALF OF THE RAILROADS.

GENERAL STATEMENT.

Under date of October 10, 1913, the sixteen articles now under arbitration were submitted by the Brotherhoods to the Railroads parties to the arbitration. Upon receipt of these requests, the individual Western Railroads gave notice of their desire to terminate the wage schedules in effect with their engineers and firemen and to enter into negotiations for the purpose of making new agreements. The purpose sought to be accomplished by these notices was to open these schedules so that all items of compensation within them could be considered in relation to and in connection with the increases and changes contained in the demands of October 10, 1913.

Pursuant to the suggestion contained in the letter of October 10, 1913, a Conference Committee of Managers was appointed to represent the Railroads in the conducting of joint negotiations; and this Conference Committee entered into negotiations with a like Committee of the Employes, on February 21, 1914. From that date until June 1, 1914, numerous conferences were held and various proposals made, but no agreement was reached by the two committees. On June 1, 1914, the Conference Committee of Managers was advised that the entire corre-

spondence had been referred to the engineers, firemen and hostlers in the territory for the purpose of taking a strike vote on the questions in dispute; and on July 14, 1914, the Conference Committee was advised that the men concerned had decided that the proposition of the Conference Committee of Managers could not be accepted.

Efforts through mediation having failed, the arbitration agreement was signed on August 3, 1914, and provides that the schedules, rates, rules and practices relating to wages in effect October 10, 1913, were restored and are to remain in full force and effect until the end of the period covered by the award, except as modified by the award, and thereafter until changed as provided in the individual schedules; and further provides that any rates of pay including excess mileage or arbitrary differentials that are higher, or any rules or conditions of employment contained in individual schedules in effect October 10, 1913, that are more favorable to the employes than the award of said Board, shall not be modified or affected by said award.

THE ISSUES.

Substantially all of the proposals are designed to bring about greater compensation. Not merely through requested increases in the rates of pay, but through arbitrary payments in addition to the miles of the trip, or the hours on duty, as well as through changing the basis of computing so-called overtime, the demands combine in such a manner as to make cumulative the additions to present compensation.

It is conceded that the wage scale of the engineers and firemen is and has been fixed by considerations which are peculiar to and inherent in the nature of their occupation, and that their line of work involves not only labor, but also care and responsibility, so that if and when the progress of the art of the art of railroading brings about changes whereby there is imposed upon the engineers and firemen added labor or added responsibility, any tangible increase in such burden should be reasonably reflected in their compensation.

The employes having declined to submit to arbitration the question of eliminating from any schedule any rate or rule, no matter how inequitable or arbitrary, and having insisted (as the contract provides) that the starting point of the questions arbi-

trated must be the existing schedules on the several roads, it would seem apparent that the preliminary question to be answered by the arbitrators before any consideration of the detailed propositions must be: What *changes*, if any, have been made in the labor or responsibilities of the engineers and firemen since the last concerted wage movement, concluded as to the firemen on June 4, 1910, and as to the engineers on December 24, 1910.

That this correctly states the issues is clearly shown by Mr. Stone's opening statement (Record 40):

"In presenting our case, we shall hope to show by our witnesses the changed conditions under which they work and the present requirements, *as compared with the conditions in effect when the present schedules were agreed upon.* * * * These developments have had a three-fold effect on the engineers and firemen: (1) Increase in their labors and responsibilities, (2) their productive efficiency has been greatly increased, (3) their earning capacity, even at the slightly increased rates of payment they have received, has declined."

But aside from the fact that the practical effect of paragraph 11 of the arbitration agreement is to make the rates and rules established in 1910 the bases with which to make comparisons of present conditions, would not the Board in this case, as a practical matter, be driven to the conclusion reached by Hon. Seth Low and Dr. John H. Finley in the Eastern Trainmen's Arbitration, decided on November 10, 1913, where it is said (Award 31):

"In fixing the rates of pay which are given in the following award, the Board has assumed that the adjustment of 1910, having been reached, primarily by mutual agreement through mediation under the Erdman Act, must be the starting point for its conclusion.

"In reaching this opinion, the Board is in line with the opinion expressed in the Railroad's Brief (page 10) that 'the present demands for further increases in rates and improvements in working conditions can only be supported by showing that conditions have changed since that award.'

"This conclusion was inevitable from the nature of the case. Only three years ago the two organizations and the railroads concerned in this proceeding made voluntary agreements with each other; in one case they reached a voluntary agreement through mediation

under the Erdman Act; and in other cases they reached a similar basis, with some modifications, through an arbitration board consisting of a former President of each of the two organizations represented in this case. It must be evident upon the face of it that the two lay members of this Board could not hope to become competent in less than two months to find any other starting point, in an industry so complex and so technical as railroading, than such adjustments as these, so recently made, by both parties to this controversy."

As above indicated, the opening statement on behalf of the employes alleged changed conditions under which the men work in three particulars: (1) Increase in their *labors and responsibilities*; (2) their *productive efficiency* has been greatly increased; (3) their *earning capacity*, even at the increased rates of payment they have received, has declined. In addition to the three items enumerated in the opening statement, claim has also been made that since the last adjustment (4) there has been an increase in the *cost of living*.

Before any consideration of the separate articles of the proposal, it therefore seems proper to discuss and endeavor to determine whether the claimants have proved *the changes alleged*, or any of them, during the period in question.

Inasmuch as the so-called "productive efficiency" is at times treated in the employes' evidence as wholly independent of the question of increased labor and responsibility, and at other times as arising out of or caused by such added labor and responsibility, it seems logical first to take up the question whether the evidence shows an increase during the period since 1910 in this so-called productivity measured in any of the units referred to in the testimony; and later to discuss the alleged increase in labor and responsibility, whether productive or non-productive.

PRODUCTIVE EFFICIENCY.

This somewhat elusive phrase has been used in different senses in different parts of the proceedings. At the beginning the claim apparently was that the engineers and firemen were producing more units of traffic than formerly and that this increase in productivity imposed increased labors and responsibilities upon them, reasonably measured as to the firemen by their increased labors, and as to the engineers by their increased responsibilities.

At page 2037 of the record Mr. Lauck said:

"It would seem that the onus of this increased productivity has fallen, so far as arduous labor is concerned, greatly upon the firemen, owing to the coal-burning locomotives and the increased burning of coal and the increased amount of coal which it is necessary to handle per locomotive mile." (Record 2038.) "The idea is that as a man becomes more productive, more efficient, works harder, he is entitled to increased compensation and to share in the productive gains made as a result of this development of operating efficiency." (Record 2205.) "*Therefore, productive efficiency has yielded an increasing return and has been profitable, and if labor has any ground, through increased work, or increased hazard, or increased responsibility or inability to earn as much as before on the basis of even increased rates of compensation, they should participate to some extent in this increased productive return.*"

But this idea is quite different from the position of the firemen on oil-burning roads, as stated by Mr. Karn (Record 7036, 7048) who argued that an employe's pay should be measured solely by the output of the machine on which or with which he works, irrespective entirely of the nature, character or responsibility of the work he may do in connection with such machine.

While an interesting problem in economics might conceivably be presented in a case wherein there was an increased productivity within a certain period brought about through the combined contributions of labor, capital and managerial efficiency, if the problem to be solved was the proper allocation of their respective shares to capital, to managerial efficiency and to the several classes of labor contributing to the general result, yet in the instant case a discussion of any such problem seems unnecessary in view of the fact that if the theory advanced by Mr. Lauck be sound and his formulas be left unquestioned, he has demonstrated that during the period since the last wage adjustments the combined efforts of labor, capital and managerial supervision have not brought about any increase in so-called "productive efficiency."

We do not wish to be understood as assenting for one moment to Mr. Lauck's claim concerning the unit of the productivity of engineers and firemen; but it seems unnecessary to go into any discussion of the fundamental unsoundness of the as-

sumptions which underlie his formulas, in view of the fact that these formulas, when applied to the period 1909-1913, lead to the conclusion that in this period there has been no increased productivity.

Engineers and firemen have nothing to do with revenue; they are employed to run engines and produce engine-miles, which are units of expense to the company and units of compensation to the engineers and firemen. They do not produce revenue-miles or ton-miles, and over the question whether their engines haul a large or a small number of tons, or produce a large or a small amount of revenue, they have no control and no opportunity to affect results.

The number of tons of freight per loaded car, or the number of cars, or tons, per train can in no manner be affected by any duties performed by the engineer and fireman. The railroads provide the equipment; traffic officials endeavor to provide traffic; operating officials bring about better car and train loading; and constant effort is made to reduce empty car movement. All of these efforts are to bring about greater efficiency and economy, and to these efforts the duties of engineers and firemen can make no contribution. Their duties and responsibilities have no relation to whether cars are loaded or empty, whether revenue or non-revenue; and obviously they can make no contribution to efficient car loading, or train loading, or to the revenue produced thereby.

The number of cars which shall constitute a train is a matter over which the enginemen have no control. The train-dispatcher and other officers of the company determine the number of cars and the train load. Improvement in plant and facilities, reduction of grades and curves, better roadbed and machinery are the underlying essentials which capital must contribute before either operating skill or efficient labor can produce tangible improvement in productive efficiency.

Increased traffic may result from natural growth and development of the country through which the line operates, through the location of industries along the line, through skill in working out favorable traffic relations at points of interchange; and through any or all of these or many other causes there may be increase either in the ton-miles, train-miles or

revenue-miles without any change whatever in the labors, duties or responsibilities of engineers and firemen.

All this Mr. Lauck freely admits. (Record 2037):

"They have also improved the roadbed and structures, and as a result of these capital commitments, working in co-operation with labor, there has been an increased output of productivity per unit of cost."

Again at page 2096 and again at page 2260, Mr. Lauck makes clear that what he claims to show and all he claims to show by his "productive efficiency tables" is the "productive efficiency of the railroad as a plant" or the "joint gains of labor and capital in productive efficiency."

Distinctly disclaiming, therefore, that any logical reasoning can justify the admeasurement of "productive efficiency" of engineers and firemen, either in terms of "ton-miles" or "revenue train-miles," nevertheless Mr. Lauck's own formulas, if accepted as sound, clearly establish that in the period from 1909 to 1913 there has been no substantial gain in "productive efficiency" even when arbitrarily measured in terms of "ton-miles," and no gain whatever if measured in terms of "revenue train-miles."

As to Employes' Exhibit 23, covering the period 1909-1913, Mr. Lauck admitted (Record 2362-2365) that if for this period he adopted the same yardstick for measuring efficiency which was made use of (Employes' Exhibit 21) for the period 1890-1913, viz., "traffic units per \$1,000 compensation paid engineers and firemen," there would have been shown *an actual decrease*; and that only by making an arbitrary distribution of expense between his "freight traffic units" and "passenger units" can he bring about the result of showing that for the period 1909-1913 there was an increase of 4.68 per cent. as to engineers, and 4.55 per cent. as to firemen in "ton-miles per \$1,000 compensation." As shown by the foregoing excerpts from his testimony, it is clear that even with the arbitrary division of his traffic units so as to show a large decrease in passenger units, and thereby permit a small increase to remain in his freight units, this alleged 4.5 per cent. increase in the "ton-miles per \$1,000 paid engineers and firemen" on the seventy-eight roads shown in Employes' Exhibit 23, page 5, is the entire contribution in ton-miles made by all classes of labor,

by the organizing genius of the management, by the contribution of capital in the way of improvements in roadway and equipment, and by all other factors making for operating efficiency.

"Mr. Sheean: (Record 2247.) You have not attempted to ascertain what department, or in what manner, or to what degree any of the employes of the railroads have contributed?

"Mr. Lauck: No. I had no means of knowing. I simply have attempted to show the increased productive efficiency of those men, attended by the heavier work and greater responsibility."

When it is borne in mind that this comparison of "productive efficiency" measured by the yardstick of "ton-miles" is for a period beginning July 1, 1908, and ending June 30, 1913, Mr. Lauck is obliged to admit that had the comparison been made with the period at which the last increases were granted this alleged 4.5 per cent. increase would have totally disappeared. (See decision Five per cent. Rate Case, 31 I.C.C., 351.)

But even if for the purpose of the argument we accepted as correct Mr. Lauck's conclusion that there was gain in "productive efficiency" as measured in ton-miles between 1909-1913, and if we ignored, for the purpose of the argument, that a part, at least, of this increase was between July 1, 1908 and June, 1910 (when the award to the firemen in Western Territory was made), there remains the fact that the record is absolutely barren of any proof to enable the Board to determine how much of this 4.5 per cent. increase in ton-miles was due to the contribution of other classes of labor, to additional capital investment, or to improved managerial efficiency; but Railroads' Exhibit 6 does show that in the period since the last wage adjustment over \$600,000,000 has been contributed by capital toward the production of this 4.5 per cent. increase in "productive efficiency" as measured in "ton-miles."

But disastrous as is Mr. Lauck's showing on "productive efficiency" as measured in terms of "ton-miles," even worse is the result when he attempts in the last five-year period to measure "productive efficiency" or revenue gains in "revenue train-miles." Employes' Exhibits 28, 29 and 30 purport to show the increase in cost per "train-mile" for engineers and firemen, the increase in operating revenue per train-mile, the increase of operating expense per train-mile, and the increase of net operating

revenue per train-mile. Apparently these exhibits were introduced as purportedly showing that the increase in operating efficiency has produced an increase in revenue ample to take care of increased costs that must be met before increases in pay can be granted and still leave a balance for apportionment as increased compensation to engineers and firemen. Of course it needs no argument to show that the mere fact of an increase in net operating revenue per train-mile by no means proves that there has thereby been produced additional money actually available for distribution either to labor or capital. Beside the operating cost, which alone Mr. Lauck refers to in Employees' Exhibits 28, 29 and 30, there are added costs for increased capital and increased taxes, and before it can be known whether the increase in revenue is anything more than enough to meet these added burdens, as well as the operating costs, it would be necessary to determine how much the increase of these items has been and to deduct them from the increase in net operating revenues.

Mr. Lauck admitted that these exhibits take no account of increase in capital costs and taxes (Record 2175, 2176, 2183, 2184, 2196, 2199), and that these other costs might completely wipe out the increase in net revenue; but inasmuch as Employees' Exhibit 30, which covers the period 1909-1913, furnishes conclusive proof that whatever advantages have been gained through better efficiency in operation have been taken up by operating costs, it is unnecessary in this connection to give consideration to any allowance which ought to be made because of the contribution of capital in this five-year period.

It will be noted that in Employees' Exhibits 28 and 29, which cover respectively the periods 1890-1913 and 1900-1913, Mr. Lauck has made a combined showing for all the railroads so as to carry down on the last line the "net gain in operating revenue." In Employees' Exhibit 30, however, Mr. Lauck did not present any combined statement for all the railroads for the period 1909 to 1913 showing their "net gain in operating revenue"; but such a showing can be made by Mr. Lauck's own formula from his own basic figures contained in Employees' Exhibit 20. On the basis of Mr. Lauck's own statistics it appears that from a combination of the roads there shown there is no increase whatever in the net revenue, and that, as railway managers have so frequently complained, the increases in operating costs during the period 1909-

1913 have eaten up all the improvement in operating efficiency and have produced nothing whatever with which to pay the added taxes or any return upon the many millions of additional capital which has gone into the property.

The basic tables show data for sixty-two different roads. Eliminating six of them, for which data on all items to be here considered for both years 1909 and 1913 are not stated, leaves fifty-six roads for which a combined statement can be made in the same form as shown by Mr. Lauck for the earlier periods, with the following result:

			Increase 1913 over 1909.
	1909.	1913.	
Operating Revenue per train-mile.....	\$2.27	\$2.47	\$0.20
Operating Expense per train-mile....	1.45	1.65	0.20
	<hr/>	<hr/>	<hr/>
Net Operating Revenue per train-mile.	\$0.82	\$0.82	\$0.00

So, also, Mr. Lauck's basic tables (Employees' Exhibit 20) furnish information by which the additional capital cost per train mile for these fifty-six roads can be produced. In view of the Interstate Commerce Commission's supervision of the property accounts since 1907, the increase in investments between 1909-1913 can be computed from a comparison of the total investment in property and equipment for those two years. The investment in road and equipment in 1909 amounted to \$11.09 per train-mile, in 1913, to \$11.67, an increase of \$0.58 per train-mile. If a return on this additional investment employed in securing the increased operating efficiency be allowed, even at Mr. Lauck's low rate of four per cent., it would mean an increase in capital costs of 2.3 cents per train-mile, to meet which, or to meet any increased taxes, there was no addition whatever to net revenue. The details of this computation and the pages in Employees' Exhibit 20 from which the same are taken follow:

DETAILS OF COMPUTATION OF INCREASE, FROM 1909 TO 1913, IN OPERATING REVENUES PER TRAIN-MILE, OPERATING EXPENSES PER TRAIN-MILE, NET OPERATING REVENUE PER TRAIN-MILE, AND COST OF ROAD AND EQUIPMENT PER TRAIN-MILE.

	Train-Miles*		Operating Revenues†		Operating Expenses†		Net Revenue		Cost of Road Equipment||	
	1909	1913	1909	1913	1909	1913	1909	1913	1909	1913
Total for all of 62 roads included in Employees' Exhibit 20.....	473,615,005	566,136,239	\$1,071,649,693	\$1,398,072,160	\$688,573,136	\$935,761,451	.....	.....	\$5,119,785,717	\$6,708,287,980
Deduct for 6 roads for which all items are not reported:										
Canadian Northern	9,212,339	.....	24,277,478	.....	17,151,462	.....	.....	.....	221,257,997
Chicago & Eastern Illinois....	5,023,720	.....	10,269,619	.....	6,934,534	.....	.....	.....	58,140,040	.....
Arizona & New Mexico.....	141,367	153,196	977,638	1,060,292	312,116	488,301	.....	.....	.....	4,285,475
Chicago Great Western.....	5,448,898	5,972,456	8,107,289	14,000,618	7,219,976	10,260,142	.....	.....	.....	108,450,903
El Paso & Southwestern.....	2,741,796	3,248,206	7,274,014	8,657,716	4,217,721	5,118,283	.....	.....	.....	4,032,222
International & Great Northern	4,174,315	4,922,720	8,097,939	11,260,565	6,598,145	8,527,479	.....	.....	.....	36,036,236
Total deductions	17,530,096	23,508,917	\$ 34,726,499	\$ 59,256,669	\$ 25,282,492	\$ 41,545,667	.....	.....	\$ 58,140,040	\$ 374,062,833
Total for 56 roads for which all items are reported.....	456,084,909	542,627,322	\$1,036,923,194	\$1,338,815,491	\$663,290,644	\$894,215,784	\$373,632,550	\$444,599,707	\$5,061,645,677	\$6,334,225,147
Average per train-mile.....	\$2.27	\$2.47	\$1.45	\$1.65	\$0.82	\$0.82	\$11.09	\$11.67
Increase 1913 over 1909....
* Employees' Exhibit 20, page 16.	† Employees' Exhibit 20, page 66.		.....		.....		.....		.....
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
	
					

During the testimony of Mr. Lauck, attention was directed to the comments made by the Interstate Commerce Commission in the Five Per Cent. Case (31 I. C. C. 351-454) concerning the wonderful possibilities of proving different conclusions as to comparative revenues by simply selecting the proper periods for comparisons. Nothing can better illustrate what the Interstate Commerce Commission stated concerning the very period which Mr. Lauck has selected for his "Comparative Income" statement than to apply Mr. Lauck's own formula to the years 1910 and 1913—being the years in which the last wage settlement was made and the year in which the present one began.

At page six of Employes' Exhibit 39, Mr. Lauck produces a table covering forty-three representative western railroads by which he purports to show that after allowing four per cent. on the expenditures made for railway property during the five years ending with 1913 excluding capital outlays made from income or surplus, there remain \$50,541,129.00 to compensate increased labor efficiency and to appropriate for emergency reserves.

The basic figures from which this conclusion was reached are set forth on page seven of said exhibit so that there is no difficulty in applying Mr. Lauck's formula and obtaining the yearly average for three years ending June 30, 1910 and June 30, 1913, and by so doing on the same forty-three railroads Mr. Lauck's alleged surplus of fifty million dollars totally disappears and is replaced by a deficit of \$298,000.00, as shown by the following table:

STATEMENT SHOWING THE AGGREGATE OF THE AMOUNT OF INCREASED INCOME
DURING THE PERIOD 1910-1913 THAT IS AVAILABLE FOR COMPENSATION TO
ADDITIONAL INVESTMENTS IN PROPERTY, TO LABOR FOR INCREASED
EFFICIENCY, AND TO RESERVES, OF 43 REPRESENTATIVE
WESTERN RAILROADS.

BASED ON EMPLOYEES' EXHIBIT 39 AND FOLLOWING SAME FORM AS TABLE SHOWN
ON PAGE 6 OF SAID EXHIBIT.

Item.	Yearly Average for three years ending June 30		Increase 1913 over 1910
	1910	1913	
Operating Revenues	\$1,040,320,409.78	\$1,210,298,894.48	\$109,978,484.70
Operating Expenses.....	682,021,015.79	813,034,867.96	131,013,852.17
Total Net Revenue.....	358,299,393.99	397,264,026.52	38,964,632.53
Taxes	32,995,633.49	41,527,399.36	8,531,765.87
Net	325,303,760.50	355,736,627.17	30,432,866.67
Other Income.....	113,401,792.73	128,500,336.28	15,098,543.55
Gross Corporate Income.....	438,705,553.23	484,236,963.45	45,531,410.22
Deductions except interest on funded debt and appropriations for reserves, etc.	70,437,291.66	82,598,725.22	12,161,433.56
Net amount available for distribution to capital because of additional invest- ments; to labor because of increased efficiency; and to reserve for emergen- cy purposes.....	368,268,261.57	401,638,238.23	33,369,976.66
Expenditures for property (road and equipment) during the past three years	\$905,107,798.97		
Less amount appropriated from income	63,406,040.92		
	<hr/> \$841,701,758.05		
Allowance for a fair return to capital investments 4%.....			33,608,070.32
Balance remaining to compensate in- creased labor efficiency and to ap- propriate for reserves.....			d 298,093.66

d denotes decrease.

So, too, if we take the income statement of the ten representative railroads shown on page twelve of Employees' Exhibit 39 where Mr. Lauck reaches the conclusion that after allowing a return of four per cent. on expenditures for railway property during the five years ending with 1913, excluding expenditures made from income or surplus, there still remain \$39,403,-292.20 to compensate increased labor efficiency and to appropriate for reserves, even a more striking difference in the last three-year period is developed. Applying Mr. Lauck's formula to the last three-year period we reach the conclusion expressed in Mr. Lauck's language that "after allowing four per cent. on the expenditures made for railway property during the three years ending with 1913, excluding expenditures made from income or surplus, there was a deficit of \$9,469,460.73." The detail of this computation is as follows:

STATEMENT SHOWING THE AGGREGATE OF THE AMOUNT OF INCREASED INCOME
DURING THE PERIOD 1910-1913 THAT IS AVAILABLE FOR COMPENSATION
TO ADDITIONAL INVESTMENTS IN PROPERTY, TO LABOR FOR
INCREASED EFFICIENCY, AND TO RESERVES, OF TEN
REPRESENTATIVE WESTERN RAILROADS.

BASED ON EMPLOYEES' EXHIBIT 39 AND FOLLOWING SAME FORM AS TABLE SHOWN
ON PAGE 6 OF SAID EXHIBIT.

Item.	Yearly Average for three years Ending June 30		Increase 1913 over 1910
	1910	1913	
Operating Revenues.....	\$640,580,036.75	\$708,593,782.60	\$68,013,745.85
Operating Expenses.....	407,981,849.42	463,310,714.06	55,328,864.64
Total Net Revenue.....	232,598,187.33	245,283,068.54	12,684,881.21
Taxes	21,261,810.57	26,649,849.68	5,388,039.11
Net	211,336,376.76	218,633,218.85	7,296,842.09
Other Income.....	98,054,077.39	108,814,999.18	10,760,921.79
Gross Corporate Income.....	309,390,454.15	327,448,218.03	18,057,763.88
Deductions except interest on funded debt and appropriations for reserves, etc.	50,832,641.78	57,707,213.82	6,874,572.04
Net amount available for distribution to capital because of additional in- vestments; to labor because of in- creased efficiency; and to reserve for emergency purposes.....	258,557,812.37	269,741,004.21	11,183,191.84
Expenditures for property (road and equipment) during the past three years	\$551,829,047.01		
Less amount appropriated from income	35,512,733.61		
	\$516,316,314.30		
Allowance for a fair return to capital investments 4%.....			20,652,652.57
Balance remaining to compensate in- creased labor efficiency and to ap- propriate for reserves.....			d 9,469,460.73

d denotes decrease.

It seems to us that we need follow no further the speculative theory of measuring "productive efficiency" in units of "ton-miles," or revenue gains per train mile, or any of the other units, save and except the ones which may, and legitimately do in a tangible measure, make direct contribution to the general efficiency in operation of a plant. We can follow the "productive efficiency" theory when measured in units of labor, skill or responsibility; and as it seems to us, the fair, equitable and logical way of ascertaining whether any class of labor is entitled to an increased wage on the ground of increased productive efficiency, is to ascertain whether the increased productivity has been either caused or contributed to by more skill, more labor or more responsibility. In the last analysis, even though there had been shown to be an increase in productive efficiency of the plant as a whole since 1910, the question would still remain whether such productive efficiency had been accomplished by requiring more labor or imposing greater responsibility on the engineers and firemen.

HAVE LABORS OR RESPONSIBILITIES INCREASED SINCE 1910?

Treating "labor" and "responsibility" as two separate items, the only claim of increased labor since 1910 has been made upon behalf of the firemen. It was not claimed by any witness, as we recall the testimony, that the physical labor of engineers had been in any manner increased. As to the firemen, the claim in substance is: Larger engines burn more coal; the more coal burned, the harder the work of the fireman; there being more large engines now than in 1910, the amount of coal shoveled by the fireman is more; and therefore his labors have increased.

The reply of the railroads has been: Generally speaking, it is true that larger engines burn more coal; but likewise generally speaking it is also true, that such larger engines take higher rates of pay; it is also true that the difference in rates of pay between the larger and smaller engines is greater than the difference in the work on such engines; and therefore the fireman working on such larger engine receives more money per ton of coal shoveled than does the man on the smaller engine; and by virtue of the rates of pay being based on the size of engines, the practical effect upon a fireman who transfers from a small to a large engine is not merely to increase absolutely his rate of pay, but also to make such rate higher per ton of coal shoveled.

The employes produced elaborate statistics to show there has been an increase in the fuel consumed per locomotive-mile; they also introduced statistics showing aggregate payments to firemen during similar periods. But inasmuch as larger locomotives generally take higher rates of pay than do the smaller ones, the real question is: Does the installation of the larger power on these railroads cause firemen to shovel more coal *for the same money*, or does the installation of such heavier power in fact *reduce* the amount of physical labor necessary to be exerted to earn one dollar?

In introducing the employes' exhibits showing total coal consumption per locomotive-mile, Mr. Lauck stated (Record 2381) that by taking only coal-burning roads and showing their coal consumption per \$1,000 outlay to engineers and firemen would be a fair comparison between the years 1909 and 1913.

A comparison for nineteen coal-burning roads, hastily selected during the hearings (Record 2417), using the data in Employees' Exhibit 20, is as follows:

	1909	1913	Increase	Decrease	Percent
CHICAGO & ALTON.					
Tons of Coal Consumed...	717,693	927,481	209,788	...	29.23
Wages Paid Firemen....	267,854	354,522	86,668	...	32.36
Tons of Coal burned per \$1.00 paid Firemen....	2.68	2.62	.....	.06	2.24
CHICAGO, BURLINGTON & QUINCY.					
Tons of Coal Consumed...	3,552,962	4,052,009	499,049	...	14.05
Wages Paid Firemen....	1,295,861	1,570,132	274,271	...	21.17
Tons of Coal burned per \$1.00 paid Firemen....	2.74	2.58	.....	.16	5.84
CHICAGO GREAT WESTERN.					
Tons of Coal Consumed...	532,255	693,172	160,917	...	30.23
Wages Paid Firemen....	222,749	300,779	78,030	...	35.03
Tons of Coal burned per \$1.00 paid Firemen....	2.39	2.30	.....	.09	3.77
C. St. P. M. & O.					
Tons of Coal Consumed...	543,896	742,914	199,018	...	36.59
Wages Paid Firemen....	293,017	405,172	112,155	...	38.28
Tons of Coal burned per \$1.00 paid Firemen....	1.86	1.83	.....	.03	1.61
COLORADO MIDLAND.					
Tons of Coal Consumed...	192,997	149,200	.....	43,797	22.69
Wages Paid Firemen....	97,265	78,954	.....	18,311	18.83
Tons of Coal burned per \$1.00 paid Firemen....	1.98	1.89	.....	.09	4.55
COLORADO & SOUTHERN.					
Tons of Coal Consumed...	385,625	379,930	.....	5,695	1.48
Wages Paid Firemen....	223,054	221,480	.....	15.74	.71
Tons of Coal burned per \$1.00 paid Firemen....	1.73	1.72	.....	.01	.58
DULUTH, SOUTH SHORE & ATLANTIC.					
Tons of Coal Consumed...	91,109	137,156	46,047	...	50.54
Wages Paid Firemen....	68,103	96,590	28,487	...	41.83
Tons of Coal burned per \$1.00 paid Firemen....	1.34	1.42	.08	...	5.97
DENVER & RIO GRANDE.					
Tons of Coal Consumed...	1,100,795	1,190,983	90,188	...	8.19
Wages Paid Firemen....	638,261	707,154	68,893	...	10.79
Tons of Coal burned per \$1.00 paid Firemen....	1.72	1.68	.....	.04	2.33
FT. WORTH & DENVER CITY.					
Tons of Coal Consumed...	230,364	218,229	.....	12,135	5.27
Wages Paid Firemen....	100,548	95,311	.....	5,237	5.21
Tons of Coal burned per \$1.00 paid Firemen....	2.29	2.29	.....	...	...
LOUISIANA & ARKANSAS.					
Tons of Coal Consumed...	40,203	57,397	17,194	...	42.77
Wages Paid Firemen....	19,109	27,683	8,574	...	44.87
Tons of Coal burned per \$1.00 paid Firemen....	2.10	2.07	.....	.03	1.43
MINERAL RANGE.					
Tons of Coal Consumed...	40,197	36,910	.....	3,287	8.18
Wages Paid Firemen....	22,898	35,594	12,696	...	55.45
Tons of Coal burned per \$1.00 paid Firemen....	1.75	1.04	.....	.71	40.57
M. St. P. & S. S. M.					
Tons of Coal Consumed...	329,195	960,851	631,656	...	191.83
Wages Paid Firemen....	205,204	619,556	414,352	...	201.92
Tons of Coal burned per \$1.00 paid Firemen....	1.60	1.55	.....	.05	3.13
MISSOURI, KANSAS & TEXAS.					
Tons of Coal Consumed...	1,088,026	1,400,172	312,146	...	.287
Wages Paid Firemen....	494,179	682,785	188,606	...	.382
Tons of Coal burned per \$1.00 paid Firemen....	2.20	2.05	.....	.15	6.82
MISSOURI PACIFIC.					
Tons of Coal Consumed...	1,250,124	1,521,942	271,818	...	.217
Wages Paid Firemen....	564,213	702,856	138,643	...	.245
Tons of Coal burned per \$1.00 paid Firemen....	2.22	2.17	.....	.05	2.25
St. L. M. & S.					
Tons of Coal Consumed...	1,052,523	1,392,078	339,555	...	32.26
Wages Paid Firemen....	467,926	659,885	191,959	...	41.02
Tons of Coal burned per \$1.00 paid Firemen....	2.25	2.11	.....	.14	6.22
ST. LOUIS SOUTHWESTERN.					
Tons of Coal Consumed...	217,295	264,186	46,891	...	21.58
Wages Paid Firemen....	104,995	127,437	22,442	...	21.37
Tons of Coal burned per \$1.00 paid Firemen....	2.07	2.07	.....	...	...
TEXAS & PACIFIC.					
Tons of Coal Consumed...	595,502	807,984	212,482	...	35.68
Wages Paid Firemen....	372,686	438,638	65,952	...	17.70
Tons of Coal burned per \$1.00 paid Firemen....	1.60	1.84	.24	...	15.00

	1909	1913	Increase	Decrease	Percent
UNION PACIFIC.					
Tons of Coal Consumed...	1,797,349	2,370,481	573,132	...	31.89
Wages Paid Firemen.....	636,429	822,029	185,600	...	29.16
Tons of Coal burned per \$1.00 paid Firemen.....	2.82	2.88	.06	...	2.13
WABASH.					
Tons of Coal Consumed...	1,382,484	1,832,413	449,929	...	32.54
Wages Paid Firemen.....	557,022	827,593	270,571	...	48.57
Tons of Coal burned per \$1.00 paid Firemen.....	2.48	2.21	.....	.27	10.89

COMBINED STATEMENT ON BASIS OF \$1.00 PAID FIREMEN.

	1909	1913	Increase	Decrease	Percent
Tons of Coal Consumed.....	15,110,594	19,135,488	3,994,894	...	26.39
Wages Paid Firemen.....	6,651,373	8,774,150	2,122,777	...	31.91
Tons of Coal Burned per \$1.00 paid Firemen.....	2.28	2.18	.....	.10	4.39

COMBINED STATEMENT ON BASIS OF \$1,000 PAID FIREMEN.

	1909	1913	Increase	Decrease	Percent
Tons of Coal Burned per \$1,000 paid Firemen.....	2,280	2,180	.....	100	4.39

Briefly, this showing (which Mr. Lauck said (Record 2418) he was at a loss to understand), is that on these nineteen railroads which burn coal exclusively the firemen shoveled 2.28 tons of coal for one dollar in compensation in 1909 as against 2.18 tons of coal for each dollar of compensation in 1913. But to meet the possible contention that it would be more fair to compare coal consumption per locomotive-mile and compensation per locomotive-mile between the two periods, we have caused such a comparison to be made from Mr. Lauck's basic tables (Employees' Exhibit 20) covering the thirty-eight roads shown by Mr. Lauck's Exhibit as not using oil as fuel either at all or only in negligible quantities. By taking the total fuel consumed on these thirty-eight roads and dividing this by the total locomotive-miles, the result is the fuel consumed per locomotive-mile on all these thirty-eight roads considered as a whole with the following showing:

The average coal consumed per locomotive-mile increased from 150.09 pounds in 1909 to 163.91 pounds in 1913. The average compensation to firemen per locomotive-mile on these roads was 3.195 cents in 1909 and 3.698 cents in 1913. In other words, while the fuel consumed per locomotive-mile shows an increase, Mr. Lauck's statistics show also a more than proportionate increase in compensation per locomotive-mile; so that for each mile run by firemen, the amount of coal handled by them for each dollar of compensation actually decreased 5.7 per cent.

The details from which this conclusion is reached, together with references to the parts of Employees' Exhibit from which the information is taken, are as follows:

DETAILS OF COMPUTATION OF INCREASE FROM 1909 TO 1913, IN FUEL CONSUMED PER LOCOMOTIVE MILE AND IN COMPENSATION TO FIREMEN PER LOCOMOTIVE MILE.

	1909			1913		
	Pounds of fuel per locomotive mile a	Total locomotive miles b	Total pounds of fuel consumed	Pounds of fuel per locomotive mile a	Total locomotive miles b	Total pounds of fuel consumed
Chicago & Alton.....	168.92	8,525,397	1,439,772.221	193.64	5,069,321	980,403.569
Chicago, Burlington & Quincy.....	159.21	44,905,295	7,149,372.017	162.39	50,065,510	8,160,177.475
Chicago Great Western.....	159.62	6,081,483	1,066,498.316	122.749	1,886,337.866	230,179
Chicago, St. Paul, Minneapolis & Omaha.....	114.05	9,596,315	1,084,459.726	128.03	1,684,339	216,367.172
Colorado Midland.....	185.02	2,082,834	386,626.784	182.45	1,638,116	298,574.264
Colorado & Southern.....	149.27	5,187,682	774,365.292	168.06	4,535,755	762,278.985
Columbia & Puget Sound.....	142.75	220,477	31,473.092	8.778	138.60	221.480
Duluth, Missabe & Northern.....	133.24	1,984,170	265,703.211	82.309	37,569,886	10,823
Duluth, South Shore & Atlantic.....	83.22	2,199,222	183,019.255	103.05	309,036.037	99,152
Fort Smith & Western.....	85.93	505,503	43,987.873	92.66	275,290.243	96,590
Fort Worth & Denver City.....	146.05	3,141,886	400,738.252	165.91	2,630,705	436,469.267
Illinois Central.....	157.16	36,371,453	5,835,143.232	182.524	41,547,104	7,583,177.422
International & Great Northern.....	137.29	7,781,453	1,081,109.423	127.880	8,062,325.184	230,813
Louisiana & Arkansas.....	123.84	4,956,029	613,754.631	174.569	806,325.184	27,883
Midland Valley.....	118.68	665,457	80,553.570	140.04	821,890	115,097.476
Mineral Range.....	116.95	744,682	88,378.860	126.50	1,013,506	128,208.509
Minneapolis & St. Louis.....	131.51	691,095	90,823.560	126.35	586,671	74,125.881
Minneapolis, St. Paul & Sault Ste. Marie.....	104.58	2,901,460	331,571.065	163.13	6,584,570	1,074,140.904
Minnesota & International.....	84.25	6,328,531	661,869.146	265.204	16,527,383	4,394,556
Missouri, Kansas & Texas.....	135.70	16,144,040	2,190,746.228	144.53	501,944	60,317,358
Missouri & North Arkansas.....	109.31	415,185	45,332.872	121.81	19,376.042	2,800,419.350
Missouri Pacific.....	150.42	16,681,122	2,509,174.371	162.47	886,009	107,924.756
Oregon Short Line.....	156.69	6,306,422	988,153.263	219.034	18,730,773	3,043,188.689
Pecos & Northern Texas.....	135.75	569,005	77,242.429	173.16	1,711,575.709	379,232
St. Joseph & Grand Island.....	151.15	964,889	145,842.972	170.29	233,759.272	53,476
St. Louis, Iron Mountain & Southern.....	130.16	14,763,258	1,958,147.152	167.73	1,070,982	180,959.288
St. Louis Southwestern.....	102.72	3,002,578	438,147.150	139.26	2,783,113.298	652,328.918
Southern Kansas Ry. Co. of Texas.....	102.74	433,131	44,499.879	141.91	3,347,482	533,113.298
Texas Central.....	152.87	674,210	103,066.483	222.52	493,989	79,981,759
Texas & Pacific.....	121.30	775,376	94,053.109	223.96	131,317,154	21,418
Union Pacific.....	121.31	9,899,441	1,200,901.188	135.50	586,342	79,981,759
Union Pacific.....	193.50	18,992,916	3,675,129.246	213.86	11,990,998	1,624,780.229
Wabash.....	142.87	19,473,593	2,752,132.282	163.98	22,521,802	4,842,869.047
Wabash, Chester & Western.....	132.55	112,126	14,862.301	123.16	22,521,802	3,693,125.092
Wichita Falls & Northwestern.....	100.67	38,261	3,851,735	11.61	119,889	14,765,529
Wichita Falls.....	94.03	388,316	36,513.353	99.24	37,999,088	11,817
Wisconsin & Michigan.....	75.62	255,302	19,305.937	82.13	37,999,088	11,817
All Roads.....	150.09	248,621,984	37,314,756.218	163.91	296,737,346	48,638,226.549
Average fuel consumed per locomotive-mile.....		150.09			163.91	
Per cent increase 1913 over 1909.....					9.21	
Average compensation to firemen per locomotive-mile (cents).....		3.195			3.698	
Average cent increase 1913 over 1909.....					15.74	
Average cent increase for each dollar of compensation to firemen for each locomotive-mile (cents).....		2.34			2.21	
Decrease 1913 from 1909.....					.13	
Per cent of decrease.....					5.7	

a, Employees' Exhibit 20, page 104. **b**, Employees' Exhibit 20, page 26. **c**, Central Employees' Exhibit 20, page 38. **d**, Less than one-fifth of one per cent of total tractive power was in oil burners. **e**, Road merged with Illinois Central in 1911 and data for 1913 included in those for latter road. **f**, A little over 1.2 per cent of total tractive power was in oil burners. **g**, A little over 1.3 per cent of total tractive power was in oil burners. **h**, Data for 1913 included in those for Missouri, Kansas & Texas. **i**, Data for eight months of 1913 included in those of the Missouri, Kansas & Texas.

INCREASED RESPONSIBILITIES.

The claimed increase in responsibilities in the last analysis runs down to the simple proposition: The railroads are gradually installing larger engines.

Mr. Lauck (Record 2070) says, "yes, there would be more responsibility, because of the heavier train, more goods under the direction of the engine crew." * * * Various employes say, in effect (Record 953), that responsibility has increased, that they have heavier and longer trains and more machinery to look after; (Record 1010) that responsibilities have increased on account of the heavy tonnage; (Record 1095) that greater care must be exercised in starting and stopping, in the use of the air and the handling of the train through sags and descending grades; (Record 1152) that it is harder starting and stopping a large train than a small one; (Record 1256) that heavier trains increase responsibility by causing the exercise of more care and judgment.

But, as above indicated, these various forms of statement simply mean in the end that larger power is being installed and when traffic and operating conditions permit, the larger engines are expected to and do haul a heavier tonnage than the smaller engines.

As in the case of the showing that larger engines burn more coal, the weakness in probative value of the facts adduced is that no consideration is given to the fact that these larger engines are given a higher rate of pay; and no information, data or statistics are presented from which the Board could form any conclusion on the question whether these higher rates measure up to or even beyond the added responsibilities which are assumed by the engineer and fireman in handling the larger engines. From the data presented by Mr. Lauck as to coal consumption it was fairly demonstrable that on the larger engines the firemen shovel less coal per dollar of compensation than on the smaller engines; but it being admitted that an engineer and fireman who made a run on a light engine one day would, under present schedules, receive a higher rate of pay if they returned over the same division on a larger engine, the record is left without any proof whatever as to whether this higher rate on the return trip measured up to or even beyond any added responsibility which arose from the use of the heavier engine.

From the mere fact standing alone that the railroads now use more large engines than in 1910, and therefore handle more heavy trains, can any deduction be drawn concerning the wages of engineers and firemen, when it is admitted that all such larger engines, when and as installed, take a higher rate of pay than the ones which they supplant? Does proof that there are now in use more large engines than in 1910 prove anything except that *more engineers and firemen are now getting the higher rates established for the larger engines?*

The fundamental fallacy of any argument based upon the general showing that there are now more large engines than in 1910 is the assumption in any such argument that the men who have continued to use the small engines from 1910 to date should in any manner have their wages influenced or affected by the change in duties and responsibilities of other engineers and firemen who in the meantime have changed from smaller to larger power. Assume that for half the time since the last concerted movement an engineer ran an engine which took a \$4.95 rate; and assume further that this engine was supplanted by one which takes a \$5.45 rate. Granting, for the sake of the argument, everything that has been suggested by the employes as to the added duties and responsibilities on the large engine, from what fact in evidence, or suggestion in argument, can this Board say whether the change from a \$4.95 rate to a \$5.45 rate, made contemporaneously with the change in duties and responsibilities, adequately compensates for the change in duties?

Or, assume the case of a fireman who six months ago was firing an engine which takes a \$3.10 rate; assume that at that time larger engines supplanted those in use on that division, and such larger engines, when installed, at once took a rate of \$3.75 under the 1910 award; and assume further that the smaller engines were transferred to another division and continued to take the \$3.10 rate. Granting that the man now firing the larger engine does more work and has greater responsibility than he had when on the smaller engine, what is there in the proof from which the Board can decide that his pay should be *further* increased beyond the increase from \$3.10 to \$3.75 which automatically went into effect on the day he changed from the smaller to the larger engine?

Granting, as the railroads have by their respective sched-

ules, that when and as larger engines are installed, there should be increases in rates of pay heretofore agreed upon as reasonably measuring the increased labor and responsibility, does proof of the fact that larger engines are gradually being installed prove anything whatever except that *higher rates of pay are gradually becoming effective*, and that such has been the course throughout the last three years exactly to the extent that the heavier has replaced the lighter power? *When a large engine has superseded a small one a higher rate has superseded the one formerly in effect.*

This brings us to the third proposition advanced in the opening statement as a reason for the proposed increases; viz.:

IT IS CLAIMED THE EARNING CAPACITY OF ENGINEERS AND FIREMEN, EVEN AT THE HIGHER RATES AGREED UPON IN 1910, HAS DECLINED.

The only way in which this proposition could be established would be by proving that engineers and firemen "are unable to make as many miles as they formerly did" (Record 2204). This is manifest, because it is self-evident that all engineers and firemen who are paid on an hourly basis will have their earning capacity increased by a higher rate; and the only possible way in which the proposition stated could work out in practice would be by showing that the men who are paid on a mileage basis now put in longer hours to make the same number of miles than they did in 1910.

In a concerted movement such as this, it is elementary that proof that on a particular division on the Wabash (for example) men take a greater number of hours to go over the division than in 1910, can afford no reason for establishing a higher rate on some other division of the same railroad, or on some other railroad where the men now get over the division in shorter hours as well as at higher rates. Sporadic instances on particular divisions can have no probative value on the basic proposition here advanced, that *generally*, or treating these railroads as one operating system, it takes a greater number of hours to make the miles than it did in 1910. To meet the question squarely whether, in 1913, the railroads involved, treated as one operating system, kept the engineers and firemen longer on the road than in 1910, Railroads' Exhibit 10 was compiled, which

makes comparison between the operations of October, 1910, and October, 1913. It will be conceded, we believe, that the month of heavy traffic which places the greatest strain upon motive power and equipment and which presents to the train dispatcher the most serious problems as to meeting- and passing-points of trains furnishes a picture of the month in which it is most difficult to maintain expeditious movement of trains. Yet this Exhibit 10 shows that in October, 1910, on the basis of number of trains operated, 76.26 per cent. accomplished their run at a speed greater than 10 miles per hour, while in October, 1913, this percentage had increased to 77.09; on the basis of train mileage, in October, 1910, 76.40 per cent. accomplished their run at a speed greater than 10 miles per hour, while in October, 1913, this percentage had increased to 77.76. Sheet No. 2 of said Exhibit 10, showing the detail of trains operated in through freight service (in which class principally has the heavier power been installed), shows that in October, 1910, the average time for all through freight trains was 9.41 hours and the average miles, 113.2, while in October, 1913, the average time for all through freight trains was 9.31 hours and the average miles 112.6; that in this class of service, on the basis of the number of trains operated in 1910, 75.46 per cent. accomplished their runs at a speed greater than 10 miles per hour, while in 1913 this percentage had increased to 75.95; and that on the basis of train mileage in 1910, 77.24 per cent. accomplished their runs at a speed greater than 10 miles per hour, while in 1913 this percentage had increased to 78.30.

These figures which show in detail all the trains operated and all the miles run on the railroads involved in the periods for which comparisons are made, demonstrate conclusively not merely that there is no foundation for the claim made in the opening statement that the earning capacity of engineers and firemen has declined, but further demonstrate that inasmuch as the average speed of trains has actually increased, the pay of engineers and firemen has been increased not merely to the extent shown by the higher rate, but that these higher rates are earned in a somewhat shorter time on duty. In other words, facts and figures prove precisely the converse of the third proposition advanced in Mr. Stone's opening statement as one of the reasons for the proposed increase in rates.

This brings us to the fourth or last proposition which has

been advanced as a reason justifying generally an increase in rates of pay; viz.:

ALLEGED INCREASE IN COST OF LIVING.

It is very questionable whether, in a concerted movement of this character, which asks an award applicable alike to the apprentice and to the engineer on an assigned run which pays over \$3,000 a year, the cost of living can be made relevant or applicable to the issues. There is no issue here of a living wage.

What persuasive value is the cost of food in determining whether there should be a change in the wage scales of the numerous engineers shown in Railroads' Exhibit 41 as earning above \$2,200 per year and as high as \$3,725.20, or of the large number of firemen shown in Railroads' Exhibit 42 as earning more than \$1,300 per year and as high as \$2,061.63?

That the cost of living could be of but little importance in considering a request for increases of general application seems to have been conceded by Mr. Stone in the arbitration between the Eastern Railroads and the Brotherhood of Locomotive Enginemen, wherein Mr. Stone said (Record 11):

“We do not base these claims for increased compensation wholly upon the increased cost of living, as so many do, for two reasons: One is that the cost of living is largely a question of the standard of living, and, beyond a question of mere existence, is something each individual must decide for himself. The other reason is, there are so many elements that enter into the fixing of the rate of the wage for an engineer, that must, in all fairness, be given far more consideration.”

Of course, consideration of the question of an increased cost of living is entirely separate and distinct from any consideration of changes in the character of the work or of the duties and responsibilities incident thereto. The “cost-of-living” argument is fundamentally directed to the establishment of the proposition that *earnings*—not rates of pay—have not kept pace with the increases in the prices of commodities which earnings ordinarily buy. While we do not see how the Board, in a proceeding wherein the Board is asked to make an award uniformly applicable to the apprentice as well as to the men earning as high as \$3,700 a year, can very well work out a conclusion of general application from the premise of “increased cost of living,” yet,

if such attempt is made, and the average increased cost of living is considered, on the one hand, it must be equally justifiable to consider the average and progressive increase in earnings, on the other hand.

Let us return for a moment to the fireman who formerly fired an engine which took a \$3.10 rate, and who now fires a larger engine which takes a \$3.75 rate. His earnings have increased more than has the cost of living; and as above stated, the "cost-of-living" argument has relevancy only on the question of *earnings*.

As outlined in our reply to the claim that the earning capacity of engineers and firemen at the higher rates agreed upon in 1910 has declined, Railroads' Exhibit 10 conclusively demonstrates that with the installation of the heavier power which takes the higher rates of pay the earning capacity of both engineers and firemen has progressively advanced, and Table 2 of Railroads' Exhibit 39 shows that this ratio of increase in Western territory from 1910 to 1913 was 11.3 per cent. for enginemen and 11.4 per cent. for firemen, while Table 18 of said Exhibit 39 shows on the basis of the weighted index numbers of the U. S. Bureau of Labor, that between 1910 and 1913 in Western territory average expenditures for food and rent increased 9.3 per cent., and the last figures published by the Bureau of Labor (November, 1914) for the United States as a whole, showed a slight falling off from November, 1913 (Record 4962).

Employees' Exhibits 9 and 10 (Record 714, 745) use as their base the year prior to the award in the firemen's case, and make no effort to apply the weighted index used by the Bureau of Labor in determining the relative importance of articles of food. (Record 740). Mr. Carter admits (Record 753) that there was quite a change between 1909 and 1910.

According to the testimony of Mr. Vance, the application of the weighted index used by the Bureau of Labor to Employees' Exhibit 9 brings about substantially the same conclusion as that reached by the Bureau of Labor, which is incorporated in Railroads' Exhibit 39 (Record 4938). But by reference to the testimony given in the arbitration proceedings in 1910 and summarized by Mr. Vance in his Table 3 (Record 4943), it is shown that the figures now presented in Employees' Exhibit 9 show an increase of only 5.95 per cent. above the figures which

were presented to the Board of Arbitration by the Firemen in 1910.

If any consideration can be given in this movement to the question of increased cost of living, it would seem that if, on the one hand, there is to be considered the increased cost applicable to the class as a whole, there must be considered as against this the increased earnings applicable to the class as a whole. Railroads' Exhibit 20 shows that the installation of the heavier power, and therefore the making more generally applicable the higher rates of pay, has been progressive throughout the period since the last award, and as conclusively demonstrated by Railroads' Exhibit 10 the installation of the larger engines means the installation of a higher rate of pay earned on an average in the territory as a whole in just as few a number of hours.

It is therefore most respectfully submitted that the claimants, on whom rests the burden of proof on each of the propositions which they stated to be the predicates upon which are based their claims for changes in existing schedules, have failed to sustain these propositions by the necessary proof; and that, on the contrary, the railroads have overwhelmingly established that the only change either in labor, responsibility or conditions under which the men perform their work which have occurred since 1910 were foreseen, contemplated and specifically provided for in the wage adjustments of 1910; so that throughout this entire three-year period rates which produce increased compensation have automatically gone into effect when and as the changes occurred which were foreseen and provided for in said 1910 adjustments.

In approaching the consideration of the several Articles submitted by the Engineers and Firemen, the Board should be always mindful of the fact that rules worded differently in different schedules often produce substantially the same results in terms of wages, and that the presence or absence of particular rules gives little indication as to the value of a particular schedule in terms of earnings, for it was frankly stated by Mr. Cadle, (Record 206) that in the way of arbitrary rules of different schedules, there will be an arbitrary on one road and a different arbitrary on another which form part of the compensation of the men; that an arbitrary which may look like a mere service rule may work out into a compensatory rule.

Taking up the sixteen articles *seriatim*, we present below each article some of the principal objections made thereto during the testimony adduced upon the hearing:

ARTICLE I.

PROPOSAL.

BASIS OF A DAY'S WORK.

Passenger Service.

One hundred miles or less, five hours or less, will constitute a day's work in all classes of passenger service. All mileage in excess of 100 miles shall be paid for pro rata.

All Other Service Except Switching.

One hundred miles or less, 10 hours or less, will constitute a day's work in all classes of service except passenger and switching service. All mileage in excess of 100 miles shall be paid for pro rata. Ten miles' run will be the equivalent of one hour's service performed, or vice versa.

OVERTIME IN ROAD SERVICE.

Passenger Service.

Overtime in passenger service will be computed and paid for on a basis of twenty miles per hour, at rate for each class of engine used.

All Other Road Service.

Overtime in all other service except passenger and switching service will be computed on a basis of ten miles per hour, and paid for at the rate of 15 miles per hour, at rate for each class of engine used.

All overtime will be computed on the minute basis.

Paragraphs 1 and 3 of this Article create an absolute five-hour day in passenger service, and provide for payment of overtime on a speed basis actually in excess of the scheduled speed of several hundred passenger trains in western territory (Railroads' Exhibit 40). Railroads' Exhibit 1, page 5, shows that the rule generally in effect in Western territory provides that 100 miles or less, or 10 hours or less, will constitute a day's work in all classes of passenger service, and that mileage in excess of 100 miles, or hours in excess of 10 will be paid for pro rata; 46.33 per cent. of the mileage represented provide for a day of 10 hours or less, 100 miles or less; and 42.69 per cent. of the mileage represented simply provide that 100 miles or less will constitute a day's work.

Pages 48 and 49 of Railroads' Exhibit 1, show that 68.3 per cent. of the mileage in Western territory pay overtime at the rate of 10 miles per hour; that 12.7 per cent. allow a flat rate per hour for overtime and that 97 per cent. allow less than 20 miles per hour as overtime in passenger service.

As stated by employes' witness, Mr. Moore (Record 151),

there seems to be no schedule that has a rule identical with the one proposed.

Mr. Cadle admitted that these paragraphs of Article 1 (Record 261) applied to all turn-around passenger service, no matter how short, and on all branches.

Mr. Trenholm called attention (Record 4976) to the fact that all classes of passenger service, whether main-line, branch, turn-around or suburban, would fall under the operation of this rule, and that about 40 per cent. of the mileage in this territory is branch mileage, many of the branches being less than 100 miles in length, which would be most seriously affected by this proposal. He called further attention (Record 4978) to the fact that this five-hour day or less only applies between starting time from a passenger station to arrival at its terminal station; that in addition to this five-hour day or less (even though it be a two-hour day) proposal asks that an arbitrary amount be paid as preparatory time, and another arbitrary amount for moving the train from the roundhouse to the passenger station, and still another arbitrary for taking the engine after it arrives at the terminal station to the roundhouse track, even though the time on the road may be only three hours, for which five must be paid, and regardless of the mileage run.

In the Eastern Engineers' case the award was as follows:

PASSENGER RATES.

"The minimum passenger rate for engineers shall be \$4.25 for 100 miles or less; miles made in excess of 100, pro rata.

"Overtime in through passenger service is to be computed on the basis of 20 miles per hour.

"All passenger overtime will be paid for at the rate of 50 cents per hour and will be computed on the minute basis.

"This award is without prejudice to existing higher rates on different classes of engines."

Subsequently the Board of Arbitration was requested to interpret, among other things, the following: "What is through passenger service within the meaning of the Award reading 'Overtime in through passenger service is to be computed on the basis of twenty miles per hour?' " and gave the following interpretation:

"In regard to the interpretation of the award of the Board reading:

" 'Overtime in through passenger service is to be computed on the basis of 20 miles per hour,' the Board find it necessary also to consider service other than through passenger service and to the adjudication of this point the parties concerned agree. The following award is made:

"On short turn-around runs no single trip of which exceeds 80 miles, including suburban service, overtime shall be paid for all time actually on duty or held for duty in excess of 8 hours (computed on each run from the time required to report for duty to end of that run) within 12 consecutive hours; and also for all time in excess of 12 consecutive hours computed continuously from the time first required to report to final release at end of last run. Time shall be counted as continuous service in all cases where the interval of release from duty at any point does not exceed one hour.

"All other passenger service overtime shall be paid for on the basis of 20 miles per hour computed from the time required to report for duty until released, and separately for each part of a round trip run."

It will be noted that neither in the award nor in the interpretation is there any "five-hour day."

While the award in the Eastern Firemen's case provided for a five-hour day in passenger service other than turn-around and suburban (as to which the above award in the Eastern Engineers' case is followed), it also established a flat rate of thirty cents per hour for overtime in all passenger service. It is to be observed that the hourly overtime rate of engineers in passenger service is less than one-eighth of their minimum daily rate, and the overtime rate for firemen is only about one-eighth of the minimum daily rate established by that award for passenger service.

Mr. Trenholm pointed out (Record 5520-5521) that ordinarily the passenger engineer accomplishes his run in a short number of hours and is paid for a large number of miles, so that usually (Record 5541) there is little possibility of road overtime in passenger service, and when it does occur it is generally due to snow blockade, accident or tie-up when the men are not actually working, and there is no good reason why overtime in passen-

ger service should start under a ten-hour period more than in any other class of service.

It should be borne in mind that there exists on the 139,411 miles of railroad represented in this movement far greater diversity of operating conditions than is found on the 66,876 miles involved in the Eastern Engineers' Arbitration, wherein the award above cited fixed a speed basis of twenty miles per hour and gave only a spread of twelve hours in turn-around service. The speed which can be uniformly maintained in passenger service depends, of course, upon the topography of the country as well as upon the character of roadbed and equipment, and from the exhibits introduced both by the employes and the railroads (Employes' Exhibit 77; Railroads' Exhibit 40), it is shown that the rule adopted in Eastern territory would require several hundred passenger trains in this vast Western territory to be on overtime basis, although encountering no delays en route and making the time at which scheduled between terminals.

It is also pointed out that in mountain territory in the West the slower train movement compared with valley territory is generally recognized by the application of a higher rate. Such differentials do not obtain in the East or Southeast because the physical characteristics of these sections do not demand it. So that the application of a speed basis for fixing overtime in comparatively level country to runs which are part or all mountain miles would work out a disparity in conditions which would be without justification.

So, also, in this vast Western territory a rule of universal application to short turn-around runs must necessarily be more elastic than in the smaller Eastern territory where turn-around runs can be arranged to meet conditions which do not obtain in Western territory. Table 3 of Railroads' Exhibit 16 shows that the population per mile of line in Eastern territory is 662.1, as against 243.2 in Western territory.

Railroads' Exhibit 3, sheet No. 2, shows that if paragraphs 1 and 3 of Article 1 had been in effect during the month in which this proposal was made, such provisions would have required additional payment to the engineers and firemen for that single month in the sum of \$75,298.85, or over \$800,000 per year. Where, may we ask, in the record is there a scintilla of evidence pertaining to the work of the passenger engineers or passenger firemen

on any road in the entire territory which shows either a change in conditions under which they work, or any changed responsibility between 1910 and the present date, or any fact or circumstance whatever calling for more liberal compensation to the passenger engineers or firemen?

Paragraphs 2 and 4.

The first sentence of paragraph 2 is substantially the rule now in effect on eighty-four per cent. of the mileage in this territory. Practically all of these schedules further provide:

"Time in excess of 10 hours, or mileage in excess of 100, pay pro rata," but in connection with the existing standard rule, fixing the basis of a day in miles or hours, there are numerous modifications and local agreements which permit of enlargement of the use of engineers and firemen different from the letter of the rule (Railroads' Exhibit 1, page 272-275). All of these have been developed as between the individual roads and the Committees representing the men and are usually in recognition of some peculiar operating requirement of the particular line. No evidence was presented as to why these conditions should be changed, as in the past they have not been considered as violative of the minimum day principle. They should not be abolished under any reassertion of the standard basis of a day by this Board.

It is to be observed that the proposed rule retains the provision that *mileage* in excess of 100 miles shall be paid for pro rata, but eliminates the rule now practically universal of paying for the hours over ten pro rata.

While Mr. Cadle (Record 201) disclaims that it was the intention of the last sentence of paragraph 2 to combine hours made on a part of the trip with miles made on another part of the same trip, nevertheless, this sentence is pointed out by Mr. Trenholm (Record 4997) as susceptible of admitting claims for pay in both time and miles for the same service, which is incorrect in principle.

Paragraph 4 seeks to establish in lieu of the principle of paying pro rata for hours over ten, the principle of premium or punitive payments, which has always been considered both impracticable and inequitable in transportation service. As pointed out by Mr. Trenholm (Record 5005), the practical effect of any such rule would be to pay a man who ran one hundred miles in

fifteen hours more than another man who ran one hundred and fifty miles in fifteen hours.

Mr. Trenholm points out at length (Record 5038 to 5040) the impracticability in transportation service of so regulating the hours of engine or train employes at all times as to justify the imposition of punitive or penalty rules similar to those which can be applied in the shops or building industries where the employer is at all times able to regulate and control absolutely the question whether he will or will not incur overtime. He further testified that it is to the interest of an operating officer to get his men over the road just as fast and just as promptly as he can, and that whenever a run is made at a slower speed than ten miles per hour, the railroad is increasing its operating cost, with no corresponding return in revenue; that under the present schedules where all time is paid for on the pro rata basis, the interests of the operating officials and the men in charge of the trains are mutually directed to the end of making the trip in as short a time as operating conditions will permit. In no branch of the transportation service has the punitive principle been recognized. In numerous mediation proceedings a request for time and one-half for overtime has been withdrawn, and in only two cases has it been submitted to arbitration, with the result in both cases of a decision against the request. In the arbitration proceeding between the Yardmen represented by the Brotherhood of Railroad Trainmen and thirteen railways having terminals in Chicago, the following rule was requested:

“Yardmen will be paid on the basis of time and one-half for overtime. Any fraction of an hour to be paid for as one hour.”

The award on this request, made by the Illinois State Board of Arbitration on March 18, 1910, from which we quote as follows:

“Switchmen, or yardmen, as they are referred to by the Brotherhood, perform two distinct forms of service.

“The first is yard service, which, according to the testimony rendered and the observations made by the Board, is the more onerous and hazardous. The second is the transfer and industrial service, which involves considerably less hazard, and less physical exertion. From the information at the service of the Board, it is

impossible to draw any sharp line of demarcation between these two classes of service because a crew may perform yard service for part of a day, and may be assigned to transfer service for the remainder of the day. All the men in the switching service are considered as belonging to the transportation service, and any rule concerning so vital a question as overtime, will therefore affect the entire service of which the switchmen are a part.

"In reaching its decision on this point, therefore, the Board has had to give consideration not only to the result in this particular case, but also to the effect which its decision would have on the rest of the railway service.

"It is argued that a punitive overtime charge is the only effective means of limiting the hours of labor, and that such a charge is of practically universal application in all organized industries. Evidence was also presented, however, to the effect, that the custom in all transportation service is to pay for overtime on a pro rata and not on a punitive basis. So well established seems to be this principle, that in the controversy between the Railroads and the Switchmen's Union, which is now being arbitrated under the Erdman Act, no claim for overtime has been made, nor has this question been raised, so far as the Board is aware, in any of the other pending controversies between the Railroads and their employees.

"Conditions in the transportation service differ from those in the shop, or in the building trades, in that overtime cannot be readily and completely controlled. Weather conditions, density of traffic, unexpected breakdowns at points lacking facilities for prompt repairs may, either singly or together, cause delays to such an extent that a run which, under reasonably favorable conditions takes ten hours, may be protracted to fourteen hours.

"In such cases the crew is not called upon to perform 40 per cent. more labor, as would be the case in a shop, but is required to spend 40 per cent. more time in performing the same amount of labor. To that extent, therefore, the Railroad Company is already penalized for the delay, and it does not seem proper to the Board that, in the transportation service, further pecuniary penalty shall be assessed.

"The Board, while unwilling to establish a rule which will have so broad an application, is conscious of

the fact that the hours of labor in yard service, in some of the cases mentioned, are too long to insure that degree of alertness and bodily vigor which is necessary to prevent men from taking unnecessary chances.

"As the purpose of the request for overtime is to reduce the hours of work, rather than to increase the compensation, the Board has decided to deny the request for this rule, and to introduce in its stead, and as a substitute for rules 5 and 10 given on page 45 of the Confidential Preliminary Report, the following rule:

" 'Ten hours or less, shall constitute a day's work, and the duties assigned to each crew shall be such as not to require a longer day's work under average conditions. No new work shall be assigned after the expiration of ten hours, nor, except in cases of emergency, shall any new work be assigned shortly before the expiration of ten hours, if such assignment shall cause the men to work overtime.

" 'Yardmen will be paid pro rata for overtime. Anything less than thirty minutes of any hour will be paid for as one-half hour; anything more will be paid for as one hour.' "

Following the foregoing award, it was modified by mutual agreement, dated March 25, 1910, between the railroads affected and the Committee of the Brotherhood of Railroad Trainmen to read as follows:

"Ten hours, or less, shall constitute a day's work.

No new work shall be assigned after the expiration of ten hours."

In the arbitration under the Newlands Act between the Eastern Railroads and the Order of Railway Conductors and the Brotherhood of Railroad Trainmen, in which Hon. Seth Low and Dr. John H. Finley were the neutral arbitrators, it was held:

Overtime.

"The men have asked for a new rule to provide for the payment of overtime at time and a half, instead of as now, pro rata. The payment for overtime pro rata is based upon the fact that the men's time being taken should be paid for, but punitive overtime, if it is to be allowed, must be justified upon different grounds. The Board is in sympathy with the expressed desire of the men to reduce overtime as much as possible, and it rec-

ognizes that the payment of time and a half for overtime is a well established custom in the building trades and possibly in some other trades. But, wherever it prevails, so far as the Board is aware, the determination as to whether overtime shall or shall not be paid for, rests with the employer. In railroading it is quite evident that in many cases neither the management nor the trainmen can prevent overtime; and it appears to this Board, therefore, that punitive overtime as it is called is an unsound principle when applied to the running of trains. The Board hopes that some other method can be devised for reducing overtime; for it does earnestly believe that the hours demanded in Slow Freight and Construction Service are unreasonably long. If no other remedy can be found, possibly punitive overtime should be tried; but this Board does not deem it wise to adopt this rule at the present time.

“As to overtime in Yard Service, the intermediate members of the Board are less clear, because they are less sure that overtime in yards is beyond control of the management. They have declined the rule in Yard Service, however, partly because it has been recently disallowed by an Arbitration in Illinois, and partly because, not being itself sure, it has seemed to the Board unwise to disturb existing arrangements.”

Mr. Keefe (Record 3824, 3840) Mr. Higgins (Record 4832, 4834) and Mr. Trenholm (Record 5536, 5588, 5590) testified to the impracticability as well as the inequity of the proposed punitive rule; and gave as their judgment as practical operating men, that the tendency of any such rule would be demoralizing, because of furnishing conflicting incentives to operating officials and to men upon the road, whereas under present conditions they have the same incentive; viz., to accomplish the run as speedily as practicable.

ARTICLE II.

PROPOSAL.

RATES OF PAY.

Passenger Service.

The rate in passenger service on locomotives other than the Mallet type weighing less than:

	Engineers.	Firemen.
80,000 lbs. on drivers shall be.....	\$4.50	\$2.90
80,000 lbs. and less than 100,000 lbs. on drivers.....	4.60	3.00
100,000 lbs. and less than 140,000 lbs. on drivers.....	4.80	3.15
140,000 lbs. and less than 170,000 lbs. on drivers.....	5.00	3.25
170,000 lbs. and less than 200,000 lbs. on drivers.....	5.15	3.40
200,000 lbs. and less than 225,000 lbs. on drivers.....	5.35	3.50
225,000 lbs. and less than 250,000 lbs. on drivers.....	5.50	3.65
250,000 lbs. and over on drivers.....	5.60	3.75

In all classes of service except passenger and switching service on locomotives other than Mallet type weighing less than:

	Engineers.	Firemen.
80,000 lbs. on drivers shall be.....	\$5.00	\$3.25
80,000 lbs. and less than 100,000 lbs. on drivers.....	5.20	3.40
100,000 lbs. and less than 140,000 lbs. on drivers.....	5.40	3.50
140,000 lbs. and less than 170,000 lbs. on drivers.....	5.60	3.65
170,000 lbs. and less than 200,000 lbs. on drivers.....	5.80	3.75
200,000 lbs. and less than 225,000 lbs. on drivers.....	6.10	4.00
225,000 lbs. and less than 250,000 lbs. on drivers.....	6.40	4.25
250,000 lbs. and over on drivers.....	6.70	4.50

Mallet type engines, all classes of service, except switching service, weighing less than:

	Engineers.	Firemen.
250,000 lbs. on drivers.....	\$7.50	\$4.90
250,000 lbs. and less than 300,000 lbs. on drivers.....	7.75	5.10
300,000 lbs. and less than 400,000 lbs. on drivers.....	8.00	5.25
400,000 lbs. and over on drivers.....	8.25	5.50

As shown on Railroads' Exhibit 1, pages 58 to 63, the great majority of schedules in Western territory classify engines on the basis of size of cylinders. By the award in the Firemen's case of June 4, 1910, a uniform rate was fixed for "simple engines having a cylinder twenty-four inches or over in diameter, and on compound engines weighing 215,000 lbs. or more on drivers"; and by the agreement with the Engineers, dated December 24, 1910, a uniform increase was provided for "engineers in through freight or passenger service, on engines (other than Mallet type) weighing 215,000 lbs. and over on drivers." In Western territory, therefore, the only uniform "weight-on-driver" basis in schedules of both engineers and firemen pertains to engines weighing more than 215,000 lbs. on drivers. Below that weight classifications are both on a cylinder and weight-on-driver basis (Record 5302), depending upon the manner in which individual schedules have been built up.

In the opinion of Mr. Tollerton (Record 4266) there is a fairly well fixed ratio between tractive effort and size of cylinders, and inasmuch as size of cylinder is one of the important factors in determining what a locomotive will do, he considers the size of cylinder basis more satisfactory than weight on drivers, inasmuch as there is never any difficulty in ascertaining exactly the diameter of the cylinder.

This is in harmony with the views expressed by Mr. Stone in the Eastern Engineers' case, wherein he stated (Brief 22): "We believe their claim for weight on drivers to govern is not as fair as our claim for size of cylinders to govern because the cylinder is really the greatest factor in deciding the tractive power of the engine."

While the use of either the cylinder basis or the weight-on-driver basis are only approximate methods of determining tractive effort (Record 4267), and while Mr. Trenholm (Record 5304) expresses the belief that there would be no objection on the part of the railroad companies to transferring from the cylinder basis to the weight-on-driver basis if this were permitted by the men in such manner as to accomplish actual standardization or uniformity (Record 5305), yet Mr. Tollerton directed attention to the fact (Record 4273) that in order to go to the weight-on-driver basis it would be necessary to reconstruct schedules which are built up to a cylinder basis, so as to make the one fit into the other. Mr. Trenholm indicated (Record 5302) that in his opinion there was no serious objection either to the cylinder basis around which the schedules have grown up, or to the weight-on-drivers (Record 5303), but he protested that the basis should be one or the other and not an admixture of the inequitably high rates produced by resorting at times to one basis and at times to the other. As illustrating this proposition, Mr. Keefe (Record 4111, 4112) pointed out how an oil-burning engine in passenger service, which took a rate of only \$2.50 prior to the 1910 movement, and which even on the high rates proposed in the present submission would take only a \$3.25 rate on the basis of weight-on-drivers, was awarded a \$3.75 rate in the arbitration of 1910, simply because of the large size of the cylinder on that particular type of engine. Having obtained in 1910 this \$3.75 rate based on the size of cylinder, on an engine which the employees' exhibit shows would take only a \$3.25 rate

on the weight-on-driver basis, it is, as Mr. Keefe points out (Record 4114), proposed to retain this high rate given by the cylinder basis; but wherever a weight-on-driver basis will give a higher rate than the cylinder basis, to go to the weight-on-driver basis.

Mr. Trenholm testified (Record 5068) that he had been unable to get any information from the committee which presented the proposals now in arbitration as to why the particular classifications were made; and the cross-examination of Mr. Carter (Record 407, 409) discloses that Mr. Carter could give no reason either for the starting point or for the selection of any of the dividing points which appear in the graduated scale of rates.

It may be interesting to compare the requests embodied in Article I. with the award in the Eastern Firemen's case, handed down April 23, 1913, as follows:

Article 2:

The following rates of wages per day shall be the minimum rates paid in all classes of service on all railroads, parties to this arbitration:

(a) PASSENGER SERVICE.

Weights of Locomotives in pounds on Drivers.		
Less than 80,000	pounds.....	\$2.45
80,000 to 100,000	"	2.50
100,000 to 140,000	"	2.60
140,000 to 170,000	"	2.70
170,000 to 200,000	"	2.85
200,000 to 250,000	"	3.00
250,000 to 300,000	"	3.20
300,000 to 350,000	"	3.40
All engines over 350,000 lbs. on drivers.....		3.60
Mallet engines regardless of weight on drivers..		4.00

FREIGHT SERVICE.

Less than 80,000	pounds.....	\$2.75
80,000 to 100,000	"	2.85
100,000 to 140,000	"	3.00
140,000 to 170,000	"	3.10
170,000 to 200,000	"	3.20
200,000 to 250,000	"	3.30
250,000 to 300,000	"	3.55
All engines over 300,000 lbs. on drivers.....		4.00
Mallet engines regardless of weight on drivers..		4.00

Where two firemen are employed on a locomotive as a result of the application of Article 6 hereinafter, the rates of pay to each fireman shall be as follows:

Weight on drivers, 100,000 up to 250,000 lbs.....	\$2.75
“ “ “ over 250,000 lbs.....	3.00

As was so well stated by Mr. Stone in his argument in the Eastern Engineer's case (Record 1009):

“Gentlemen, there is no good reason why a man should go out of the yards in Chicago with the same class of engine and start west for \$5.40, with 1,800 tons, and take the same engine in the Lake Shore yards, and start east with 3,500 tons for \$4.85.”

By the Firemen's Award of 1910, a differential was created between oil-burning locomotives and certain coal-burning locomotives in freight service, and this differential it is proposed to abolish by proposed Article II. So, also, Mr. Carter (Record 414, 415) took the position that in the graduated wage scale no recognition should be given to the fact that on heavier engines superheated attachments and mechanical stokers were installed, stating that he would expect a fireman on a mechanically stoked engine to receive the same progressive advance in pay as on a hand-fired engine.

ARTICLE II. (Continued).

PROPOSAL.

*Pusher, Helper, Mine Runs, Work, Wreck, Belt Line, Transfer, and All Other
Unclassified Service.*

Engineers and Firemen on Locomotives in pusher and helper service, mine runs, work, wreck, belt line and transfer service, and all other unclassified service, will be paid through freight rate according to the class of engine.

This paragraph of Article II, seeks to throw into a single group different classes of service which vary to fit conditions peculiar to individual roads. Rates appearing in the various schedules have been adjusted to measure up to the varying service performed under diverse conditions in different localities, and no reason was offered by any witness on behalf of the employes in support of the claim that "all other unclassified service" should be computed on the through freight basis.

Mr. Trenholm pointed out (Record 5122) how the language "unclassified service" would open up the possibility of endless

discussion covering business specials, milk trains not scheduled, distribution of empty cars along the road, etc. He pointed out that provisions as to circus trains differed in different localities because of the varied manner of handling such business in dissimilar territory.

Pusher and Helper.

Mr. Cadle admitted (Record 229) that this proposition contemplates that any engine which at any time in the day does helper work shall get helper pay; that a yard engine helping a train out of the yard would be paid 100 miles for pushing out of the yard, and also a day in yard service.

The witnesses Jones (Record 913), Johnston (Record 1101), Hodges (Record 1348) and Crylie (Record 1652, 1659) show how varied is the pusher service on the different roads concerning which they testified (Southern Pacific, Canadian Pacific, Chicago, Milwaukee & St. Paul and Denver & Rio Grande); and from their testimony it would seem to be a justifiable conclusion that helper rates and rules must be provided so as to fit these varying operating conditions and situations.

Mr. Trenholm pointed out (Record 5077, 5078) the practical consequences of the rule applied in the way in which Mr. Cadle testified it was designed to apply. He stated that nearly every road at some point on its line has to assist trains, and gave as a fair example of this situation the operations in St. Paul, where practically every heavy train, both freight and passenger, is helped over a short grade of approximately two per cent. Frequently these trains "bunch up" so that every engine working in the yard some time during the day will help a train. Therefore it would be impracticable to assign helpers to this service, inasmuch as five or six passenger trains come in within two or three hours in the morning, all of them have to be helped, and after that there is a lapse of time when there is no need of helper service, as there are no trains to help, and there is no reason why pushing these trains should be classified in any higher class of service than switch engineer or switch fireman (Record 5081).

Mr. Keefe pointed out that the earnings of the men in pusher and helper service were very high (Record 4104, 4105) and if this proposal was granted the effect would be to raise these high earnings still higher.

Mine Runs.

Mine runs are generally understood to be short runs to mines, where empties are distributed and switching is done, and bringing in loaded cars from the mines.

Mr. Ellis (Record 6820) described the details of mine run service on the C., R. I. & P. Ry. between Centerville and Numa, a distance of eight miles, in addition to which he did all of the station switching at Centerville.

Mr. Richardson (Record 1190) describes similar operations on the D., S. S. & A., where, during the ore season, cars are taken to the mines at which switching is done, this service reaching to mines from a half mile to four miles distant from Negaunee (Record 1188).

Mr. Trenholm cited an example on the Rock Island, Indian Territory Division (Record 5291) of a mine run, showing that the effect of these proposals would be to increase the engineer 720 per cent. and the fireman 725 per cent.; and cited an example on the Missouri Pacific mine run between Bush, Ill., and Minos (Record 5293), showing that these proposals would bring about an increase of 300 per cent. in the compensation of the engineers, and 304 per cent. in the compensation of the firemen.

Work and Wreck Service.

Railroads' Exhibit 1, pages 19 to 21, shows the wide variation to meet local conditions in the schedule provisions which cover this class of service. Mr. Cadle admitted (Record 177) that only thirteen Western roads pay through freight rates, and agreed that a road having favorable rules for work train service could retain all these rules and if the request was granted, could then apply through freight rates to varying work train rules, such as "mileage to and from work," "hours at work," "pay for Sundays," etc., etc. (Record 214), thus producing different results under different schedules, as well as higher earnings on some roads than could be made in through freight service in the same miles or hours.

Belt Line and Transfer Service.

Mr. Cadle stated (Record 213) that it was essential there should be some definition of just what is transfer service and that there is no general understanding or recognized definition

determining a switching movement or a transfer movement. If this be true, the interjection into the schedule of any such rule as is here proposed would afford opportunity for dispute and controversy concerning a term as to which "there is no general understanding."

How transfer switching service commingles and overlaps in switching on terminal lines is clearly set forth by Mr. Smith, an engineer in the employ of the Terminal Railway Association, St. Louis (Record 1949 to 1952).

It was pointed out by Fireman Minton, in the employ of the Texas & Pacific, that the Ft. Worth Belt Railway, which is one of the parties to this proceeding, does switching only (Record 1969); and Mr. Trenholm stated (Record 5120) that the Ft. Worth Belt Railway was simply a switching line which does no transfer work. On this part of the proposal Mr. Trenholm's opinion was (Record 5118) that it was entirely a local question whether so-called transfer service may at a certain point be more nearly comparable to switching than to road service; and that inasmuch as there is no uniformity in the transfer service, no uniformity in the conditions under which it is conducted (Record 5124), spreading all the way from joint yards of different railroad companies, where the interchange is effected practically in one yard, down to the other extreme, where the railroads haul fairly good sized trains from one railroad to another, he concludes that the only way in which this question can be adjusted fairly, is to take the manner in which the work is done at a given point, discuss it and analyze it with the men themselves through their committees, and adjust the rate to suit the conditions at the particular point (Record 5120).

ARTICLE II. (Continued).

PROPOSAL.

Divisions Where Grade Is 1.8%.

On all divisions where grade is one and eight-tenths per cent or over, an increase of ten per cent over Valley rates will be paid.

Mr. Cadle testified (Record 220-221) that mountain roads generally have a differential, some in constructive miles, some with higher rates applicable to a certain distance, and some by stating separately the rates applicable in mountain and valley

territory; that, generally speaking, roads have designated just the point or points to which payment of the differential shall be made, and such differential varies in different schedules and on the same road as between different points.

Having thus described the general situation wherever there are mountain operations, Mr. Cadle stated (Record 310) that the saving clause of agreement to arbitrate contemplates that all arbitrary mileage or excess mileage in mountain territory shall be retained in addition to application of ten per cent. increase—that is, men would retain present mileage differentials and also provide a new rate differential, so that where mountain service has been allowed constructive miles, saving clause would keep these constructive miles and apply ten per cent. increase.

The simple statement of the intent and purpose of the proposal seems to us to furnish ample reason why it should be refused.

But aside from the absurdity of this pyramiding one differential upon another, the testimony developed that in Illinois and Missouri (Record 4285, 4286) as well as at numerous places in supposedly prairie territory, there are grades of more than 1.8 per cent. In fact, Mr. Trenholm gives as his opinion that nearly every railroad in the movement has some grades of 1.8 per cent. (Record 5128) and states that all freight trains coming from Western territory going east to St. Paul pass over a grade of 1.8 per cent. or greater.

The discussions which arose during the hearing as to the peculiar provisions covering mountain operations have probably made clear to the Board that the proper differentials because of grade have been adjusted on the individual lines in view of the peculiarities of the particular situation; that on some roads a day is allowed for shorter mileage; on others an increased rate is given in certain designated territory; on others constructive miles are allowed (Record 5132); and in no instance was any proof offered to show that the particular differential now in existence did not adequately and fairly provide for the peculiarity of the territory to which it is applicable.

ARTICLE II. (Continued).

PROPOSAL.

Narrow Gauge Locomotives.

On roads where narrow-gauge locomotives are in service, a five per cent increase over present rates in effect shall be granted.

The only narrow gauge service described by any witness on behalf of the employes is that on the D. & R. G. between Salida and Gunnison, and Salida and Alamosa. Fireman Crylie, describing this service, says the tonnage has increased from 35 to 60 tons in the last year, (Record 1650) although the size of power has been the same since 1903 (Record 1656); but states that rates of pay on narrow gauge engines were increased from \$2.78 to \$3.05 in freight, and \$2.71 to \$2.95 in passenger service on April 1, 1912 (Record 1662).

Mr. Cadle, testifying on behalf of the employes (Record 231), stated that the proposal for narrow gauge service contemplates an additional five per cent. in rates, and also that all other rules, such as preparatory time, terminal delay, etc., would be applicable to narrow gauge operations; that the five per cent. increase is solely as to rates, and the changes in other rules are also applicable, including increase of ten per cent. on grades of 1.8 per cent. or over.

Mr. Trenholm read into the record (Record 5157) an example of a narrow gauge run on the D. & R. G.—Chama to Cumbres—showing increase in compensation to engineer of 174 per cent. and to fireman of 189 per cent.; also another run (Record 5279), Salida to Gunnison, showing increase in compensation to engineer and fireman of 84 per cent.

The peculiarity of narrow gauge operation and the adaptation of rates and rules to meet the peculiarities of this service are well set forth at pages 155 and 156 of Railroads' Exhibit 1.

ARTICLE II. (Continued).

PROPOSAL.

Electric Locomotives, Electric Either Multiple Unit or Single, Gasoline or Other Service.

Wherever electric, multiple unit, gasoline or other service is installed as a substitute for steam, or is now in operation on any railroad parties to this agreement or on any of the tracks operated or controlled by any of them as part of their system, the Locomotive Engineers and Firemen shall have the right to the position

of Motorman and Helper, respectively. The term "helper" will be understood to mean the second man employed on electric locomotives or other power.

Seniority Rights; Rules, Hours of Service and Mileage.

Seniority rights to be interchangeable. Steam rules, hours of service and mileage to apply with the following rates of pay:

Passenger Service.

	Motorman.	Helper.
20,000 lbs. tractive power and less.....	\$4.50	\$3.35
Over 20,000 lbs. tractive power and less than 25,000 lbs.....	4.60	3.35
Over 25,000 lbs. tractive power and less than 30,000 lbs.....	4.70	3.35
Over 30,000 lbs. tractive power and less than 35,000 lbs.....	4.80	3.35
Over 35,000 lbs. tractive power and less than 40,000 lbs.....	4.90	3.35
Over 40,000 lbs. tractive power and less than 45,000 lbs.....	5.00	3.35
Over 45,000 lbs. tractive power and less than 50,000 lbs.....	5.15	3.35
Over 50,000 lbs. tractive power and less than 55,000 lbs.....	5.35	3.35
Over 55,000 lbs. tractive power and less than 60,000 lbs.....	5.50	3.35
60,000 lbs. tractive power and over.....	5.60	3.35

All Other Service Except Passenger and Switching.

	Motorman.	Helper.
20,000 lbs. tractive power and less.....	\$5.00	\$3.75
Over 20,000 lbs. tractive power and less than 25,000 lbs.....	5.20	3.75
Over 25,000 lbs. tractive power and less than 30,000 lbs.....	5.30	3.75
Over 30,000 lbs. tractive power and less than 35,000 lbs.....	5.40	3.75
Over 35,000 lbs. tractive power and less than 40,000 lbs.....	5.60	3.75
Over 40,000 lbs. tractive power and less than 45,000 lbs.....	5.80	3.75
Over 45,000 lbs. tractive power and less than 50,000 lbs.....	6.00	3.75
Over 50,000 lbs. tractive power and less than 55,000 lbs.....	6.20	3.75
Over 55,000 lbs. tractive power and less than 60,000 lbs.....	6.40	3.75
Over 60,000 lbs. tractive power and less than 65,000 lbs.....	6.60	3.75
Over 65,000 lbs. tractive power and less than 70,000 lbs.....	6.80	3.75
70,000 lbs. tractive power and over.....	7.00	3.75

Switching Service.

	Motorman.	Helper.
20,000 lbs. tractive power and less.....	\$4.75	\$3.10
Over 20,000 lbs. tractive power and less than 40,000 lbs.....	5.00	3.10
Over 40,000 lbs. tractive power and less than 60,000 lbs.....	5.50	3.10
60,000 lbs. tractive power and over.....	6.00	3.10

The only electric service in Western territory described by any witness on behalf of the employees is that in the Great Northern tunnel at Tye (Record 1226-1250). This also is said (Record 116) by Mr. Moore to be the only electric service in Western territory in which a second man or helper is employed. In this service, Mr. Finn says he earns about \$1,900 a year as motorman (Record 1236), although his earnings have been as high as \$220 per month (Record 1247).

Multiple unit service on the Southern Pacific was fully described by Mr. Hewitt (Record 4432), as were also the methods adopted in qualifying the engineers when transferred from steam to electric service.

We think it is perfectly proper to state that there is not a syllable of evidence in the record which has any tendency to show that rates now paid in the electric service as it exists, are not full, fair and adequate; and the real purpose of the proposal, as we

view it, is to have established for all time in a service which is still in an experimental stage, the proposition that "steam rules, hours of service and mileage will apply."

The position of the railroads, as stated by Mr. Trenholm (Record 5580) was that it was only proper and right for a road that has engineers and firemen, when they changed to some other motive power than steam, to give its engineers and firemen the opportunity to handle the new style of power; but that inasmuch as the duties are not as hazardous or exacting and the responsibility can be no greater (Record 5160) the question of rules and rates suitable to the service should be left open so as to make such rules and rates fit the changed character of service which comes about with the change in motive power.

Mr. Hewitt testified that in the Southern Pacific suburban service, which is now the principal electric service in the Western territory, engineers have a flat rate of \$5 per day, irrespective of the miles run; that overtime is paid after ten hours; and that the service averages about eight hours per day (Record 4440). He called attention to the great difference in duties with reference to inspection, care of machine, lubrication, mechanical responsibility, etc. (Record 4441, 4442), between the locomotive engineer and the electric motorman.

Of course the second man or "helper" on an electric motor performs practically no physical labor. Neither the motorman nor the helper has any responsibility as to the creation or maintenance of the power utilized by the machine. These and many other considerations show that many rules reasonably necessary in steam service would be wholly inapplicable in electric service, except to bring about the result testified to by Mr. Cadle (Record 206) that "an arbitrary that may look like a mere service rule may work out into a compensatory rule."

Railroads' Exhibit 1, page 174, shows that in Eastern territory, where electric service has been more extensively developed than in the West, some railroads have a straight hourly rate, while on the Manhattan Division of the Pennsylvania Lines East, 118 miles in electric service is treated as the equivalent of a minimum day; and on the Long Island Railroad in electric service 130 miles is thus treated as the minimum; and on the Rochester Division of the Erie, the minimum miles are 150.

In the condition of the proof in this case, it seems to us in-

evitable that the Board must reach the conclusion that the question of working conditions and mileage in electric service which shall constitute a day, must be left to the development of this service until experience has given some light as to the propriety of rules and rates framed specially to suit the peculiarities of this service.

In the arbitration between the Eastern railroads and the Brotherhood of Locomotive Engineers, the award stated (p. 79):

“Since the use of electric locomotives or multiple unit trains upon steam railways is in so early a stage of development, and there is as yet no approximation to stable conditions, but a wide variation in existing practices, the Board found themselves unable, from the evidence before them, to make any uniform rules regulating rates of pay and conditions of service for engineers or motormen employed on such trains. The minimum day’s wage of \$4.25 in passenger service is, however, awarded; but the day’s work covered by the same, both as regards hours of service and mileage covered is that which now exists in the electric service on the various roads, not that covered under the preceding heading ‘Passenger Service.’

“This award is without prejudice to existing contracts for such service.”

ARTICLE III.

PROPOSAL.

Local or Way Freight Service.

Local trains are way freight or mixed trains whose work is the loading or unloading of freight or doing station switching en route.

Engineers and Firemen on such trains will be paid ten per cent increase over through freight rates.

Additional Pay.

Through or irregular freight trains doing work such as loading or unloading freight, stock or company material, switching at stations, spurs, mines, mills, or required to pick up or set out cars, unless cars to be picked up are first out, or cars to be set out are switched together at terminals, or doing any other similar work, shall be paid for same at overtime rates in addition to time or mileage made on the trip.

Way Freight.

The position of the railroads has always been that local or way freight trains differed so widely in make-up and character

of service that it is impracticable to make a definition applicable to all localities in a territory so vast as the one here involved. Local or way freights are so designated on time cards (Record 5176, 5177).

Employees' witness, Moore (Record 119, 157), admits that no railroad schedule has the definition which is proposed by paragraph 1 of this Article; and Railroads' Exhibit 1, pp. 175-178, shows that in the three territorial divisions of the United States there is generally no effort to define by schedule provision "local or way freight service" and that where such definition is attempted on the roads severally, consideration is given in each schedule to the peculiarities of the conditions on the particular railroad, and special provisions are inserted to cover such peculiarities. An example of this is the definition on the New York, New Haven & Hartford (p. 177 of Railroads' Exhibit 1); and wherever any definition is attempted, it appears that such definition is framed to meet conditions peculiar to the road on which the definition is in force.

The practical impossibility of defining a service which varies so greatly in so vast a territory, so as to respond to the demands of the communities served, which is described at length by Mr. Higgins (Record 4798), and by Mr. Trenholm (Record 5583 to 5587), was apparently appreciated by the engineers in the concerted movement of 1910. At that time Article VIII. of their request was "that we endeavor to decide with the management what constitutes a local or way freight train." The agreement entered into December 24, 1910, under said Article VIII. was: "Withdrawn without prejudice, on the ground that it is a matter to be adjusted with the individual roads."

In the arbitration between the Eastern railroads and the Brotherhood of Locomotive Firemen and Enginemen, Article II. of the Firemen's request proposed, among other things, that "Firemen on all freight runs that load or unload freight, and firemen on all freight runs that set out or pick up cars or do switching at four (4) or more points between their initial and final terminals, will be considered as in local freight;" but by the unanimous award of the arbitrators no definition of local or way freight trains was given.

Hon. Charles P. Neill in his rulings as Referee on certain

questions in controversy as to the meaning and application of the award in the above case stated: (Rulings of Referee, p. 9.)

“There is nothing whatever in the award or in the interpretations that could in any way be construed as determining specifically what should constitute either one of the above-named services (transfer service and local freight service). On the contrary, the matter of fixing what constitutes these respective services is left to be determined by the respective roads and their firemen. In the original request prepared by the firemen and submitted to arbitration, the Board of Arbitration was explicitly asked to fix the conditions that should distinguish local from through freight service. In its award the Board fixed minimum rates for ‘local freight’ service and provided that ‘transfer’ service should take the through freight rate; but it did not in any way indicate what should constitute local freight or transfer service. Controversies promptly arose as to what properly constituted each of these services respectively, and when the Board reconvened to pass on the matters in dispute, it was asked, in the nine questions submitted by the Firemen,

“ ‘6.—What constitutes transfer service?

“ ‘7.—What constitutes local freight service?’

“In the interpretations handed down in answer to the questions submitted to it, the Board not only specifically declines to say what shall constitute transfer service or local freight service; but, in substance, says the matter is to be determined by the schedule rules on the various roads; and that where on any road there are no schedule rules governing what shall constitute these respective services, the representatives of the employes on such road should take the matter up with the proper representative of the road and agree upon such rules.”

Mixed Trains.

Not only does this Article III. attempt a hard and fast definition of local trains, but it proposes to give to “mixed trains” a rate ten per cent. higher than through freight rates. As pointed out by Mr. Cadle (Record 65) the term “mixed train” service is meant to cover service that hauls both freight and passenger traffic—that hauls freight cars as well as coaches or accommodation cars. Much of this service is on branch lines where Mr. Cadle says (Record 338), the crew do all the work

there is on the branch; that as a general proposition there is only one crew on the branch. Mr. Cadle admitted (Record 217) that under this proposal, if granted, a single car of stock put into a passenger train which did not occasion the making of any more than the customary passenger stops, would nevertheless elevate the engineer's and fireman's rate not merely from the passenger rate up to the through freight rate, but ten per cent. beyond.

Railroads' Exhibit 1, p. 116, shows that to cover this "mixed train" service schedules of the various roads contain provisions applicable to the peculiar service on different lines or even on different parts of the same line. Some schedules fix various daily and monthly rates for specified mixed runs; both daily and monthly rates vary on different runs on different branches of the same system; some runs pay a fixed monthly wage based on calendar working days and ignoring hours, while others have monthly rates of pay with provision for overtime after ten hours. Some schedules make provision for paying passenger rates when no freight cars are handled, and through freight rates when freight cars are handled; others provide for paying through freight rates when only passenger cars and through freight are handled, and local rates when way freight is handled, and local work done. These varying provisions are manifestly adapted to meet the varying character of the service performed on the different roads and on different branches of the same system; and it is worthy of note that no witness was introduced on behalf of the employes to testify that in any kind of "mixed service" the rates of pay provided in existing schedules was not adequate, or to offer any suggestion why any such "mixed service" should be put upon a uniform basis whereby it would bear a fixed percentage relationship to the rates in through freight service.

Ten Per Cent Differential.

The second paragraph of Article III. seeks to change the differential established for both engineers and firemen in 1910; and this notwithstanding the fact that the differential now existing in Western territory is the same as the differential established in the Eastern Engineers' award and higher than the differential established in the Eastern Firemen's award made April 23, 1913.

Mr. Trenholm conceded (Record 5582, 5596) the propriety of a differential, but claimed that conditions are just the same now as they were at the time the present differential was awarded to the firemen and agreed upon with the engineers. In connection with the work of a local freight train Mr. Trenholm called attention (Record 5596) to the fact that the tonnage of such local freight trains is not ordinarily as heavy as on through freights; that in the course of a trip, while the train crew are loading and unloading merchandise, the engineer and firemen frequently simply wait for the train crew to complete this work.

In the award of the Western Firemen's case, made June 4, 1910, it was unanimously held:

"Firemen in local 'way freight service' shall be granted an increase of twenty-five cents per 100 miles or less over through freight rate established by this arbitration, except on roads having an eight hour day or $12\frac{1}{2}$ miles per hour basis for such runs. On lines where increased rates are now allowed in local or way freight service over through freight rates, such differentials to be maintained."

Under date of December 24, 1910, the Western railroads and their Engineers agreed:

"For engineers in local or way freight service a differential of twenty-five (25) cents per day over rates paid on same class of engines in through freight service. This not to apply on roads paying engineers on basis of $12\frac{1}{2}$ miles per hour. Where a greater differential now prevails, same shall be maintained."

Since the foregoing adjustment in Western territory the question of a differential between local and through freight service has been submitted in separate arbitrations by the Engineers and Firemen in Eastern territory; and in the Engineers' case it was awarded, on November 2, 1912; (Award 80) "Twenty-five cents per 100 miles or less is to be added for local freight service, to through freight rates, according to class of engines. Miles over 100 to be paid for pro rata." In the Firemen's award handed down April 23, 1913, it was held (Award 4): "Firemen in local freight service will be paid fifteen (15) cents in addition to through freight rates according to class of engine."

It is therefore respectfully suggested that the differential established in the West, both in arbitration and mediation, should remain unchanged, in view of the fact that there has been no proof offered as to any change in the relative conditions of local and through freight service since 1910. Furthermore, whatever is the difference between the two services, no wider variation exists in the West than in the East, and the recent arbitrations in Eastern territory having established differentials no higher than the ones which now exist in Western territory, such present differentials should receive the approval of the Board.

Additional Pay, (Work En Route).

The last paragraph of Article III. apparently seeks to establish a principle that the work of an engineer and fireman on a through train *excludes* all "work such as loading or unloading freight, stock or company material, switching at stations," etc., etc.; and that when the crew of a through freight train is called upon to do any such work they "shall be paid for same at *overtime* rates in addition to time or mileage made on the trip."

Speaking of this rule, Mr. Higgins said (Record 4798):

"Everything cannot be through freight. Everything cannot go over the road without pulling a pin, you know, between terminals. The railroads are there to promote the work of communities."

Mr. Trenholm described at length (Record 5166) the necessity, in order to serve communities properly in the distribution of local freight, of taking carload lots over part of a district on a through freight train and permitting these carload lots to be taken over the remainder of the district by the local or way freight. These fast freights (Record 5168, 5169) set out at convenient points at varying distances from jobbing centers the carload lots which the local freight distributes on the following day; and the handling of cars from grain elevators, or of cars of stock at points where switch engines were not maintained, could not be done by through trains under the proposed rule, except under penalty of paying overtime, no matter how short the time on duty of the through freight crew which did the work. Irregular freights (Record 5180) are liable to be called upon to do any class of work that the locality or the conditions of the business make necessary. Trains are run to take care of the

business as it develops and accumulation of loaded cars at intermediate points is sometimes more than the way freight can handle, and in such case the train dispatcher starts out a train light enough to pick up these cars, and in practical operation it is an impossibility to serve the needs and legitimate demands of the shipping public and at the same time avoid the punitive payments which this paragraph of the rule admittedly contemplates.

Speaking of this paragraph of the request, Mr. Trenholm said (Record 5183) :

“Under the application of this rule, if you stopped him to get some cars at an elevator—you had an urgent call for relief at a blocked elevator, or if he was called upon to set some cars at a stock yard, to load stock, or do any of that class of work, he would receive his 100 miles for the trip, while he performed it in eight hours, yet, he would be entitled, under this rule, to the actual time that he consumed doing this outside work, in addition to his day’s pay of 100 miles, and that time at time and a half, which would produce him, if he was one hour doing it—it would produce him 115 miles, while his time in the actual service was possibly eight hours. It is an arbitrary, and I don’t think those arbitraries are sound in principle. The computation of a man’s time, beginning when he reports for duty at a designated place and continuing until he is finally released from all duty, would pay him for any work that he did at any of these points, or any time that he was idle, or whatever the cause that occasioned his being on duty beyond ten hours.”

Mr Higgins (Record 4710, 4798) explained the rule on the Missouri Pacific which gives engineers in through freight service consuming two hours picking up and setting out cars, or doing other switching between terminals, the benefit of local freight rates for the trip, with the proviso that this rule should not increase the earnings of the through freight man beyond the earnings of the local freight on the same district. But Mr. Higgins pointed out that this Missouri Pacific rule was remedial to meet conditions on certain parts of that line (Record 4710); and while Mr. Trenholm believed that, generally speaking, a train which did two or three hours local work should receive local freight pay (Record 5747), nevertheless the converting of a through freight into a local freight by any fixed

number of hours or specified number of switches, while possibly feasible on a single road, cannot be made universally applicable on so many different roads which have different operating problems without injustice to some of them, and that while this problem is not at all hard for a single road, where the officer knows all the conditions and where he can consult with his local committee, it is a hard thing to arrive at for all these roads under all these conditions (Record 5747).

ARTICLE IV.

PROPOSAL.

Switching Service.

Rates of Pay.

	Engineers.	Firemen.
Engines weighing less than 140,000 lbs. on drivers.....	\$4.75	\$3.10
Engines weighing 140,000 lbs. and over on drivers.....	5.00	3.25
Mallet type engines	6.00	4.00

Railroads' Exhibit 1, page 188, shows that practically all the roads in Western territory are now paying a minimum rate of \$4.25 in first-class yards, and that the rate thus paid is higher than in the East, where a minimum rate of \$4.10 was awarded.

The award of April 23, 1913, in the Eastern Firemen's case fixed a rate of \$2.50 on locomotives weighing less than 140,000 pounds on drivers, and \$2.60 on engines weighing 140,000 pounds or more on drivers.

Mr. Carter testified (Record 520) that there is a close approach to uniformity in rates paid for yard service in different parts of the West. A comparison of the rates shown in Railroads' Exhibit 1 (pages 188, 189) shows that "this close approach to uniformity" is in fact quite general throughout the United States, except that the firemen (both white and colored) in Southeastern territory are not paid as high a rate as was awarded in the East or as is now paid in the West. As with all other rates, those covering firemen in switching service were fixed in Western territory by the award of June 4, 1910, and those covering engineers in switching service were fixed in Western territory by the agreement of December 24, 1910.

In his printed brief presenting the case for the engineers in the Eastern arbitration, Mr. Stone said (Brief 30):

“We simply ask you to compare the rates requested with the rates that are now paid on engines of a similar class in both the Southern and Western territory.”

All we care to say in this proceeding about paragraph 1 of Article IV is simply to ask you to compare the rates requested in that paragraph with the rates awarded in the East and with the rates now paid in the West.

ARTICLE IV—(Continued).

PROPOSAL.

Engineers and firemen required to begin service other than between the hours of 6 a. m. and 8 a. m. will be paid 2 cents per hour, in addition to above rate.

Employes' witnesses Cadle and Moore (Record 77, 246, 161) testify that no schedule provides a differential for engineers and firemen on account of starting work at other than between certain hours. Page 200 of Railroads' Exhibit 1 shows this to be the fact. While several employes' witnesses (Record 788, 1889, 1938, 1964, 1978) testified generally to the fact that switch engineers and firemen prefer day to night service, and stated generally that it was more difficult to get the signals of the switchmen at night, and more dangerous because impossible to see whether cars are in to clear, yet in the end no fact is stated in justification of the proposal which would not be just as applicable in describing the differences between night and day service on the road.

It would seem from the statements of these employes that the real reason for the presentation of this part of their proposal is that there has been long established a differential in favor of the night work done by switchmen. But Mr. Trenholm points out that the night differential of yard switchmen was established on account of the great hazards and difficulties of these men in the old "link-and-pin" days (Record 5193), and that even since the abolition of the link-and-pin coupler the hazard of men on the ground climbing on cars, setting brakes, jumping down from that to make couplings—the danger in the night of stumbling, the danger of walking through the yards with moving cars all around them, all combine to justify a differential in favor of night switchmen, and that these reasons (Record 5609) which caused the establishment of the differential are wholly inapplicable to the yard engineers and firemen. Un-

der present practice (Record 5194-5613) some men select night yard work during the hot summer months, and ordinarily (Record 5614) night yard service is simply one step in a man's promotion. The young fireman usually gets his first experience (Record 5614) in a night switchyard, from which he graduates to road work, and as he becomes older, is passed to the grade of engineer. His seniority rights (Record 5614) quite frequently give him his first engine experience in night switching, after which he passes to road work; and this course is not unlike the experience of a telegraph operator, whose first service is a night job, from which he graduates to work at more desirable hours as opportunity presents.

ARTICLE IV—(Continued).

PROPOSAL.

Day's Work.

Ten hours or less will constitute a day's work in switching service. Time to be computed continuously, all over ten hours to be computed and paid for at rate of time and one-half. All overtime to be computed on minute basis.

Meals.

Switch Engineers and Firemen will not be required to work longer than six consecutive hours without being allowed thirty minutes undisturbed for meals.

Railroads' Exhibit 1 (page 201) shows that practically all the railroads in Western territory are on the basis of a ten hour day in switching service. Employes' witness Cadle explained (Record 77) that the proposal differs from the present rules in providing continuous service, and that by continuous service is meant that if a man starts to work at seven in the morning and works until six in the evening he will receive compensation for eleven hours, while the present practice is to deduct the dinner hour (Record 78) except when he is required to work any part of the designated dinner hour, in which event the company is willing to and gives him an hour's pay. In other words, in the yards at outlying points described by Mr. Trenholm (Record 5219) the practice under present schedules would be, for instance, a switch crew that went to work at seven in the morning and was relieved at twelve noon, again resumed work at one p. m. and worked until six p. m., would be paid for ten hours' service.

While paragraph three provides for computing time continuously, paragraph four provides for an allowance for meals;

so that the practical effect would be to reduce actual working time of each ten hour day to nine and one-half hours. As was developed in the colloquy between Mr. Trenholm and Mr. Byram (Record 5212), the present rules provide a full hour for meals, therefore under the proposal for continuous time, with only thirty minutes for meal (insufficient time to go home for a warm meal), the men are asking for more onerous conditions than they now have, and are substituting mere pay for the actual full meal hour, which Mr. Trenholm says (Record 5206) it is quite generally practicable to give switching crews at the present time. Under present practices (Record 5218) there has been a strong effort on the part of the railroads to permit men to go to their meals between designated hours, and at many yards where business is light, and there is absolutely no need of the engineer being on his engine at the noon hour, the engineer is actually released and goes home to his meal (Record 5621), while this rule proposes to exact continuous payment even where conditions permit the switch engineer and fireman to have his noon meal with as certain regularity as a school-teacher. It was developed (Record 5738) that the meal hour in switching service is fixed on most roads by rule applicable to the entire crew (foreman, switchmen, engineer and fireman), who are relieved at the one time, and it is submitted that this whole matter would be left in a chaotic state if this Board should establish a meal hour rule which varied from the meal hour fixed for the switchmen on the same road, possibly leading to the situation that the switchmen on the roads described by Mr. Trenholm (Record 5737), where the entire crew is actually permitted to take the full hour for their noon-day meal, would still insist upon that right, so as to make it impossible to use the switch engine during the noon hour, although the engineer and fireman would be on continuous time.

We respectfully submit that the practice of actually giving to the yard enginemen the full meal hour within a designated spread when conditions for their actual release for one full hour will permit, is a practice which should be encouraged rather than eliminated, as is proposed, and that present schedule provisions should be continued, inasmuch as they provide an inducement to the railroads actually to grant the full meal hour wherever possible and failing to do so they allow payment for

the hour whenever the schedule limits are exceeded. The practical effect of present schedule provisions on a large majority of the Western roads is that if the emergencies of the work require the men to work during the designated meal hour, they are allowed thirty minutes for their meal and are paid for the full hour. A rule manifestly remedial in its purpose and designed to bring about the desirable result of providing a designated meal hour for men in this class of service is now sought to be stripped of any remedial features and converted into a mere money-producer, with the sacrifice of any inducement to operating officials to endeavor to provide reasonable and regular meal hours for their men.

Punitive Overtime.

Concerning the request for time and one-half for overtime in yard service, we call attention to the fact that the two decisions from which we have heretofore quoted—that of the Illinois Board of Arbitration and that of the recent United States Board of Arbitration in the Eastern Trainmen's case—specifically passed upon yard service. Mr. Cadle admitted (Record 242) that this proposal was not found in any existing schedule; and Mr. Trenholm stated (Record 5043) that the reasons against punitive payments applied to yard as well as to road service; that the business of a railroad is flowing continuously and that the operating official has no control over the time of the arrival of such business; that you imagined at five o'clock in the afternoon your yard is pretty well cleaned up, when you will get a telephone message that fifty or seventy-five cars of stock have shown up at some point to provide for; that the organization of a yard must be so elastic that it will respond to the demands of the business; that on engines in yard service which are double crewed, the day crew ordinarily comes on duty at seven o'clock in the morning and works until six o'clock in the evening with the noon hour off, making a ten hour day; that the night crew start at seven o'clock in the evening and work until six o'clock in the morning, with an hour out for meals. Mr. Trenholm described (Record 5044) his personal experience in the St. Paul yard, where practically at the time which ordinarily ended the day's work as many as six trains from the main line would all put into the yard between

the hours of six and seven o'clock in the evening, all to be broken up and sorted. He stated that the present practice (Record 5188) was to try to confine switch service as closely as possible to ten hours, but that it is bound to overlap, because the business does not come in a regular way that could be relied on (Record 5189), as can be done in other lines of business; and this overlapping in his opinion (Record 5229) would not adjust itself to an eight hour day any better than it would to a ten.

Mr. Keefe (Record 7370), in response to a question asked by Mr. Carter, described switching operations at Galveston, and pointed out how impossible it is to relieve yard crews at a certain and regular hour; that sometimes they are relieved at six p. m., sometimes at seven, sometimes at eight, according to the character of the work they have to do. As further illustrating the fact that railroads cannot fix with certainty the hour of relieving switch-engines, Mr. Keefe stated (Record 7376), in connection with the October, 1913, pay-roll figures of the C., M. & St. P. Ry., that on double crewed switch engines a considerable amount was now paid to both crews, this overlapped time being due to the fact that one crew was being paid because of having reported and being ready to go on duty, and the other crew being paid because they had reached their point of release. Inasmuch as Mr. Carter so frequently referred to the eight hour day in switching service on the New York, New Haven & Hartford, it is interesting to note that the daily rate in eight hour yards is \$3.50 for engineers and \$2 for firemen, while the same road pays in ten hour yards to engineers \$4.10 and to firemen \$2.50. This information is set forth at pages 188 and 189 of Railroads' Exhibit 1.

ARTICLE IV—(Continued).

PROPOSAL.

Road Engine Used.

When Road Engines are used in yard service, road rates will apply.

In the correspondence between the Conference Committee of Managers and the Committee representing the Employes (Record 3388) the foregoing article was quoted and the question asked: "It is present practice on a number of lines to use engines assigned to road service temporarily in switching service,

pending taking them into shops for repairs. Such engines are fitted with front and rear headlights and footboards. Under such conditions will this clause of above quoted article apply?" To the foregoing question the reply was: "Yes."

Mr. Cadle testified (Record 3390): "The way that rule is written I do not see how you can interpret it any other way than that road rates would apply to all converted engines, whether temporary, permanent or otherwise."

Mr. Moore, a witness on behalf of the employees (Record 123) stated he was unable to find any such rule in any schedule.

Mr. Trenholm testified (Record 5229) that a great many of the lighter class engines are being converted into switch engines; that is one of the uses that the railroads are making of the lighter classes of power; road engines permanently converted to yard service are equipped with foot boards, front and rear headlights and when thus equipped with the proper switching attachments are properly equipped for switching work (Record 5633).

It is rather interesting to note that in the arbitration between the Eastern railroads and their engineers, Mr. Stone pointed out (Brief 35-36) as one of the important reasons for increasing rates in switching service that

"many of the roads do not buy or build engines for switching service, but take road engines for the service. Many of these engines are in such bad shape they are no longer fit for road service, so they are placed in the yard to get a little more service out of them before being placed in the shop for general overhauling."

In other words, the conversion of road engines into switch engines was treated as an established practice incident to yard operations which justified an increase in yard rates. But the increase in yard rates granted in the East in the proceeding in which the foregoing argument was made not having brought the rates in Eastern yards up to the generally established rate in first-class yards in the West, but having nevertheless accomplished the purpose of increasing the rates on all yard engines, it is now proposed to establish in the West a further increase on certain classes of engines dependent entirely upon the use for which they were intended rather than upon any characterizing features in design or construction.

From pages 220 to 227 of Railroads' Exhibit 1 appear the various schedule provisions covering all contingencies where road engineers or firemen are called upon to do yard work, possible combinations of switching and road service, service outside of yards by yard crews, etc., and it is respectfully submitted that no practical reason has been advanced why a road engine used in switching service should receive higher rates of pay than any other engine used in the same service.

ARTICLE V.

PROPOSAL.

Preparatory Time.

Engineers and Firemen in all classes of service, will be allowed thirty minutes as preparatory time in addition to all other time or mileage made on the trip or day, at the pro rata rate corresponding with class of locomotive and service; provided, that on lines of railroad where rules or schedules require them to be on duty more than thirty minutes before time ordered to leave roundhouse or other point, they will be allowed one hour's time, and when required to be on duty more than one hour, actual time will be allowed. Preparatory time will be the time Engineers and Firemen are required to be on their locomotives, prior to time ordered to leave roundhouse or other point.

ARTICLE VI.

PROPOSAL.

Terminal Delay.

Passenger Service.

Initial terminal delay for Engineers and Firemen in passenger service shall begin at the time they are called to leave roundhouse or other point and shall end upon departure of trains from passenger depot.

Final terminal delay for Engineers and Firemen in passenger service shall begin at the time they arrive at passenger depot, and will end when relieved from duty.

Freight Service.

Initial terminal delay in freight service shall begin at the time Engineer and Fireman called to leave roundhouse or other point and shall end when train has passed from yard track or lead to main line, and actually departs from the terminal.

Final terminal delay in freight service shall begin when train arrives at switch leading from main line into yard, and shall end when Engineer and Fireman are relieved from duty; provided, that if from any cause trains are held out of yard, final terminal delay shall begin.

Minute Basis.

Engineers and Firemen shall be paid on a minute basis for all terminal delay, at the pro rata rate for the class of engine used; this in addition to all time or mileage made on the trip.

Inasmuch as the Board in both the Engineers' and Firemen's Eastern Arbitration treated and disposed of "Preparatory Time" and "Terminal Delay" as inter-related subjects, it is deemed desirable to present our suggestions with reference to these two articles at the one time.

We concede (Record 5016) that in computing compensation on the basis of the standard 10-hour day, and when the basis of pay is hours, compensated time shall begin when men are required to report for duty and end when released; but it should be understood in this connection that this concession does not apply to roads which now have better than the 10-hour day. But the railroads do not approve any methods of computing the enginemen's working time which permits segregating a portion of that time necessary to the performance of the run to be compensated on an arbitrary basis separately without reference to the time or miles of the run. Any method of payment which divides the working time of engineers and firemen into different periods, in a continuous service, for the purpose of insuring arbitrary payments is not equitable. A part of the employment of enginemen is the taking of the engine from the roundhouse to the depot or yards, and from the depot or yards to the roundhouse at the beginning and ending of their runs, and rates and rules generally have been adapted to this principle and payments made accordingly. A division of this service into different arbitrary periods results in more than one payment for the one service.

That wage schedules have been built up on the principle that a part of the enginemen's duty is the necessary preparation was clearly stated by employes' witness Young, who said (Record 1334) that during all the time he has worked on the Union Pacific preparatory duties have been incident to the engineer's work; that it is a part of the engineer's business (Record 1335) to make a preparatory inspection and to know that he has the proper equipment for the trip; that the engineer does not do the physical work of putting the supplies on, but is responsible for knowing they are there; that in fixing rates (Record 1336) that have been made during all the years he has been employed by the Union Pacific, the rates have always included work from the time the man went to work until he got through.

Requests for preparatory time, as well as initial and final terminal delay were contained in the propositions submitted to the Board which decided the Eastern Engineers' controversy on Nov. 2, 1912, and were also contained in the propositions decided by the Arbitration Board in the Eastern Firemen's case

on April 23, 1913. The award of the Board in the Eastern Engineers' case on these three questions was as follows:

“BEGINNING AND ENDING OF A DAY.”

“In all classes of road service, an engineer's time will commence at the time he is required to report for duty, and will conclude at the time the engine is placed on the designated track or relieved by hostler at terminal.

“INITIAL TERMINAL DELAY.”

“Compensation for Initial Terminal Delay is not allowed beyond that involved in the rule, that pay shall begin in all cases at the time an engineer is required to report for duty.

“FINAL TERMINAL DELAY.”

“For freight service, final terminal delay shall be computed from the time the engine reaches designated main track switch connection with the yard track.

“For passenger service, final terminal delay shall be computed from time train reaches terminal station.

“Final terminal delay, after the lapse of one hour, will be paid for at the end of the trip, at the overtime rate, according to class of engine, on the minute basis.

“If road overtime has commenced, terminal overtime shall not apply, and road overtime will be paid to point of final relief.”

In the supplementary explanation beginning at page 83 of said award the Board says (page 84):

“Regarding Initial Terminal Delay:—Having made the award that time should begin as soon as a man is required to report for duty, the arbitrators do not in addition to this recognize that there should be payment for initial terminal delay, since this time will be regularly paid for as a part of a minimum day's work; and if men are held at the initial terminal for a considerable period, this may result in extending the time beyond the minimum of ten hours, or five hours in the case of through passenger service, and in giving compensation for overtime at the end of the trip in those cases in which the initial terminal delay is unreasonably long.”

At page 84, it is further said:

“In Regard to Final Terminal Delay:—It has been suggested upon one side that the engineer has done his duty when he reaches the yard limits, and upon the

other side that before he is paid for any delay at the terminal he should have completed his full minimum day's work in hours. It seems to the Board, however, that if an engineer has made a good run and reached the entrance to his terminal, the road should not be allowed to hold him there indefinitely. It is clear that the duty of an engineer is not complete when he reaches the switch to the terminal; he has the duty of placing his train at the designated place in the terminal, and the additional duty, after this, of taking his engine to the roundhouse. Under favorable conditions this work would occupy a portion of an hour. The Board realizes that often, during times of congested business, it is not possible to get a train to its place in the yard, and the engine to the roundhouse promptly. If the roads do not make it possible for the engineers to complete their work within the hour after reaching the yard, it is the opinion of the Board that time beyond this hour should be paid for as overtime."

In the Eastern Firemen's award it was awarded in Article 1 that:

"The time for which firemen will be paid shall begin at the time he is required to report for duty, and end when the engine is delivered at the point designated."

Article IV of said award is as follows:

"No initial terminal delay is allowed beyond that involved in the rule that pay shall begin in all cases at the time fireman is required to report for duty, but final terminal delay after the lapse of one hour will be paid for at the end of the trip, at the overtime rate, according to the class of engine, on the minute basis.

"For freight service final terminal delay shall be computed from the time the engine reaches the designated main track switch connecting with the yard track.

"For passenger service final terminal delay shall be computed from the time the train reaches the terminal station.

"If road overtime has commenced terminal overtime shall not apply, and road overtime shall be computed to the point of final release."

Employes' witness Cadle (Record 82) admits that time consumed in preparing an engine depends on class of engine, amount of work done in shop, whether filling grease cups is part of engineer's preparatory work and dependent upon other conditions which vary on different roads.

He stated (Record 208) that the only reason for insisting on this rule is that roads shall be required to pay an additional amount irrespective of the miles run or time on duty; that the proposal contemplates (Record 251) that where a switch engine is double crewed both crews will receive preparatory time; that even where hostlers brought engines to depot and where it is provided that an engineer, outbound, shall be at depot and on engine five minutes before train departs (Record 318), such engineer would be entitled to pay for one-half hour in addition to time or miles on the trip; that where a crew changed en route and the engine was not uncoupled from the train and the outgoing engineer had nothing to do except oil around (Record 322), he would be entitled to the arbitrary thirty minutes.

Mr. Higgins, speaking, not only from a review of various schedules but from his actual knowledge and experience in train service, stated (Record 4684) that the terminal delay rule was designed to correct conditions which the men could not control, and that it was wholly remedial, the initial terminal delay rule being to correct the calling of men from their homes too early or earlier than was necessary and the final terminal delay rule was to release men promptly after the completion of the trip. No one contradicted this testimony that the initial terminal delay rule was wholly remedial and designed to prevent calling men earlier than was necessary. This being the real purpose and intention of the initial terminal delay rule, it is manifest that the underlying reason for any such rule at once ceases when it is provided by schedule or award that time will begin for purposes of compensation when men are required to report for duty. Both Mr. Higgins and Mr. Trenholm strongly stated the practical reasons against the splitting of the day's work into arbitrary compensatory periods. Describing a trip starting from Chicago and ending one hundred and twenty-five miles (125) therefrom, Mr. Higgins said (Record 4732):

“He takes his engine from the roundhouse, and he couples on to the train and goes over the road and leaves the train at that terminal, and goes to the roundhouse with the engine. There is no more reason why you should specialize and set aside a certain time before he leaves, while he is leaving and after he gets in, now, than there was thirty years ago. I do not admit that

there is any justification for that. I do say this, that out of all this growth came this, that the railroads guaranteed a man pay for every mile he makes, without reference to the measure of time. He can make 200 miles in six or seven hours, as he frequently does, and he is paid for the 200 miles. He is guaranteed a minimum day every time he is called and used, that is, 100 miles. He is guaranteed a minimum hour. He cannot be paid less than ten miles an hour, when the hours exceed the miles divided by ten, because that brings the greater compensation to the man. Now, those are the guarantees that the railroad has made."

Mr. Trenholm said (Record 5638) :

"I do not believe there should be any dividing up of the day's work into arbitraries, thirty or forty minutes before he starts. I think it is all in the day's work. If the railroad pays him on the hours' basis, he should be paid for every minute. An engineer does not make miles. The machine he runs won't make any unless the company furnishes the business for the engine to make them." "When he makes a very few miles (Record 5639), he is guaranteed a day, and his ability to make miles depends very largely on the facilities that he is given on the railroad and the miles are designated. He starts out to make 100 miles. He does not start out to make as many miles as he can in a certain number of hours, but he starts out and makes a certain trip of a certain number of miles, and he makes them as fast as he can."

"When a man takes hours (Record 5640) he takes pay from the time he starts to work for the railroad, until released at the other end, and when he takes miles, it does not apply. Hours and miles is not applied under the schedule that we work under, in the same day, except under some extraordinary conditions."

Railroads' Exhibit 1 from pages 228 to 271 shows how interwoven and interdependent, so as to work harmoniously in individual schedules, are the various provisions as to when the day begins and ends, when terminal delay, either initial or final, accrues, what pay is to be given for terminal switching by road crews, etc., and any rule on any one of these subjects must always be considered in connection with its related rules in the same schedule. This indicates the absolute necessity, in case any rule is adopted in lieu of present provisions pertaining to the beginning and ending of the day, to make clear that such

rule is in substitution for existing rules covering the whole subject matter, so as to avoid the possibility (Record 5236) of duplicating payments under different rules covering the same service or time. The specific statement is now contained in many schedules that time will not be paid for under two rules for the same service.

ARTICLE VII.

PROPOSAL.

Automatic Release and Tie-Up.

Engineers and Firemen arriving at terminal or end of run are automatically released; when used again, they begin a new day.

The principle of engineers and firemen being released each time they arrive at terminal or end of run, regardless of miles run or service performed, is susceptible of requiring payments of two, three or more 100 mile allowances for a continuous service, even though such service may be less than 100 miles in the aggregate.

As Mr. Cadle admitted (Record 263), the proposed rule is a "new invention"; it has no limit as to distance, so that a man on turn-arounds and branches, even as short as three miles, would require the application of the rule (Record 261).

Mr. Cadle further stated (Record 315) that under this proposition a man would be paid two days if called for a road trip and before starting out, assisted in pushing a train out of the yard for three miles and then returned and took his train out and run 60 miles, in six hours, on duty altogether eight hours.

While Mr. Stone read into the record the statement made by the Employes' Committee to the Conference Committee of Managers that the rule was not intended to apply to regular helper or pusher service, nor to work train service, nor to suburban service (Record 103) he specifically stated that it was intended to apply to all other classes of service than the three named and that the article is modified only to that extent (Record 104).

The modification of the original request being limited to regular assigned helpers, all pusher or helper service performed by other than regularly assigned crews, would be covered by the rule, if granted.

The application of this proposal to runs regularly fixed

under present schedules leads to such absurd conclusions that we cannot believe the employes will seriously insist in argument upon any such rule. For instance, Mr. Keefe gave an example of a passenger run between Galveston and Houston and return, 53 miles one way, on which the engineer now receives \$163.24, but under this rule would receive \$356.40 per month (Record 3445). He gave the details of passenger trains 65 and 66 between Dallas and Cleburne, 53 miles one way, on which the engineer received in October, 1913, \$170.37 and under this proposal would receive \$309.78 (Record 3446). He gave details of branch mixed service between Davis and Sulphur, making four round trips, total mileage of 75 miles, on which in October, 1913, the engineer earned \$202.74 and the fireman \$119.04. Had this rule been in effect during that month the engineer would have earned \$1,435.75 and the fireman \$937.79 (Record 3448). He gave details of turn-around freight service between Houston and Alvin, a distance of 21 miles one way, for which under present practice 100 miles is paid for the 42 miles made. In October, 1913, the engineer received \$243.23 and the fireman \$148.05. Had this rule been in effect, the wage of the engineer would have been \$626.11 and of the fireman \$408.59 (Record 3451). That these examples are not unusual and that like conditions exist on practically all the railroads in the territory is shown by the examples given by Mr. Trenholm covering actual operations on the Southern Pacific, Rock Island, St. Louis Southwestern, Denver & Rio Grande, Oregon Short Line, Missouri Pacific and other roads (Record 5271 to 5294); and it is inconceivable now that they have knowledge of the actual significance of the rule proposed as one of universal application to the entire territory, the men will ask that this part of their proposal be seriously considered.

ARTICLE VII (Continued).

PROPOSAL.

Continuous Time.

Engineers and Firemen tied up between their terminals will be paid continuous time, no deductions will be made for time tied up.

Tie-ups between terminals are rare and exceptional in present railroad operation. Ordinarily they are due to occurrences which the company cannot foresee and provide against, and in

all cases serve to interrupt the traffic and to make the equipment idle and unproductive.

While certain employes testified to occasional long hours on the road, yet when the whole picture is presented, Employes' Exhibit 41 shows that the cases of continuous service in excess of sixteen hours brings an average of but one such occurrence per man over an eighteen-month period (Record 2348); and Railroads' Exhibit 12 shows that in the year ending December 31, 1913, only six-tenths of one per cent of the trains run were tied up between terminals on account of the sixteen-hour law.

At page 279 of Railroads' Exhibit 1 is set forth agreement consisting of eight articles between the Western Railways and their Conductors, Trainmen, Engineers and Firemen as to runs that are tied up in conformity with "Hours of Service" Law; and in order that the Board may have conveniently before it the exact provisions of said agreement, we here reproduce the same:

ARTICLE 1.

Under the laws limiting the hours on duty, crews in road service will not be tied up unless it is apparent that the trip cannot be completed within the lawful time; and not then, until after the expiration of fourteen hours on duty or under the Federal law, or within two hours of the time limit provided by the State laws if State laws govern.

ARTICLE 2.

If the road crews are tied up in a less number of hours than provided in the preceding paragraph, they shall not be regarded as having been tied up under the law, and their services will be paid for under the individual schedules of the different roads.

ARTICLE 3.

When road crews are tied up between terminals under the law, they shall again be considered on duty and under pay immediately upon the expiration of the minimum legal period off duty applicable to the crew; provided, the longest period of rest required by any member of the crew, either eight or ten hours to be the period of rest for the entire crew.

ARTICLE 4.

A continuous trip will cover movement straight-away or turn-around, from initial point to the destination train is making when ordered to tie up. If any change is made in the destination after the crew is released for rest, a new trip will commence when the crew resumes duty.

ARTICLE 5.

Road crews tied up under the law will be paid the time or mileage of their schedules, from initial point to tie-up point. When such crews resume duty on a continuous trip, they will be paid miles or hours, whichever is the greater, from the tie-up point to the next tie-up point, or to the terminal. It is understood that this article does not permit crews to be run through terminals unless such practice is permitted under their schedules.

ARTICLE 6.

Road crews tied up for rest under the law, and then towed or dead-headed into terminal, with or without engine or caboose, will be paid therefor as per Article 5, the same as if they had run the train to such terminal.

ARTICLE 7.

If any service is required of an engine crew, or if held responsible for the engine during the tie-up under the law, they will be paid for all such service.

ARTICLE 8.

The foregoing articles constitute an agreement for the above named Railway Companies and their Conductors, Trainmen, Engineers and Firemen as to runs that are tied up in conformity with the law, and becomes a part of the schedules or agreements of these roads, and subject to their provisions as to amendment by mutual consent. Nothing herein contained shall be construed to amend or annul any rule in the various agreements with the individual roads.

EFFECTIVE as of April 1st, 1908.

This agreement is generally effective (Record 280) at the present time. Mr. Cadle states (Record 280) that the proposal would put the engineers and firemen on a different basis than the other organizations parties to the 1908 agreement. He draws a fine distinction (Record 340) as to the provisions of the "Hours of Service" Act by pointing out that the law does not require railway companies to give trainmen "rest," but simply requires that the men be given time "off duty" and that a man does not have to take rest unless he wants to. This is apparently advanced as a possible reason for justifying the claim of continuous pay covering the period while "off duty," which the proposal frankly contemplates.

Mr. Trenholm (Record 5261, 5262) called attention to the fact that all four organizations now being under the one agreement, any change in this proceeding would have the practical effect of placing the enginemen on a different basis from the other members of the train crew; that the proposal contemplates paying the enginemen while they are sleeping or resting or released from duty in accordance with hours-of-service law, or any other reason; and that in the case of accidents, wash-outs or other troubles which obstructed the line, the effect would be to pay more than two days' wages in every calendar day; and if there was the punitive feature of time and a half for overtime, these excessive payments would be further multiplied. As with the other punitive demands alleged to be corrective in intent, Mr. Trenholm indicated (Record 5656) how the tendency of any such rule would be to lessen the man's interest and desire

to complete his run. For instance, if the time limit for completing the run was short, under present schedules all the inducement would be to get to the terminal; whereas the proposed rule would say to the enginemen: If you do get into the terminal at the end of this long run, your pay stops upon arrival; but if you tie up at a town fifteen or twenty miles from the terminal and take the same rest which you would get at home, you will draw pay all the time you are sleeping at such town, which you would not be able to draw if you completed the run. Mr. Trenholm pointed out (Record 5038) that he did not attribute to the engineers and firemen any other or different motives than those which animate all mankind; but that under present practice (Record 5657, 5658) the men on the road, the dispatcher and the operating officials all co-operate and are dependent upon each other in getting trains from terminal to terminal, and that any rule is undesirable which may have the slightest tendency to offer any incentive to any one not to co-operate to this desirable end.

Again adverting to Mr. Stone's opening statement that the employes' case is predicated upon "the changed conditions under which they work and the present requirements, as compared with the conditions in effect when the present schedules were agreed upon," we submit that claimants have not merely failed to establish more burdensome conditions with respect to tie-ups than existed either when the schedules were agreed upon or when the agreement of 1908 was entered into; but that the exact converse is proved, not only on individual railroads, but in the territory as a whole, and that this improvement is progressive with each succeeding year. As previously pointed out, Employes' Exhibit 41 and Railroads' Exhibit 12 prove, respectively, that of the men on duty more than sixteen hours, there is an average of but one such occurrence per man in eighteen months; and that of the total trains operated in the year ended December 31, 1913, only six-tenths of one per cent were tied up between terminals on account of the sixteen-hour law. On the Wabash, Mr. Cotter testified (Record 4903) they improved over sixty-six per cent in the fiscal year 1914 as compared with 1913 and in the present fiscal year a further improvement of over fifty per cent above 1914 has been made. In connection with Employes' Exhibit 88, it was shown (Record 7295, 7296) that

comparing the analysis of operations for 1914 with those for 1913 there was, generally speaking, an improvement. This is borne out by the Interstate Commerce Commission's Statistical Analysis of Carriers' Monthly Hours of Service Reports comparing the fiscal year ending June 30, 1913, and 1914 (from which report the table following page 26 of Employees' Exhibit 88 was prepared) which shows for the Railways referred to in said Exhibit 88, that there has been a decrease of over 52 per cent in the total number of employees (both train and engine service) on duty for longer periods than 16 consecutive hours.

In addition to the foregoing, which applies to tie-ups under the law, it is pointed out that the proposed rule, if adopted, would heavily penalize roads, which under their existing schedules, run freight crews at irregular times to intermediate points where business is received from and delivered to connecting lines and for other long established operating reasons. Many present schedules recognize the necessity for latitude in this respect (Railroads' Exhibit 1, pages 283, 284) and it was not shown that any injustice resulted from such agreements. To adopt the rule proposed, which would require continuous payment from terminal to terminal, would abolish all these practices thus permitted under the different schedules and impose excessive and unwarranted payments to enginemen while waiting for a return train at the intermediate point but performing no duty.

We await with interest and curiosity elucidation by the advocates of the men as to the testimony wherein, with reference to tie-ups on the road, there has been any suggestion as to "changed conditions under which they work and the present requirements, as compared with the conditions in effect when the present schedules were agreed upon."

ARTICLE VIII.

PROPOSAL.

Held Away from Home Terminals.

Engineers and Firemen held at other than home terminal (including rest period) will be paid continuous time for all time so held, after the expiration of 15 hours from time relieved from previous duty, at the rate per hour paid for the last service performed; less than one hour not to be paid for.

Engineer Smith, of the Chicago Great Western, was the

only witness who gave the average hours away from home terminals as being longer in 1914 than in 1909 (Record 1013); but he made comparison between his lay-over in Chicago in 1909, when the run was between Chicago and Dubuque, with the lay-overs in 1914 at Oelwein, when his run was between Oelwein and East Stockton. (Record 1026.)

The only other witness on behalf of the men who was asked to make comparison between present and former conditions in this respect was Engineer Jones (Record 1627), who said there had been no change in the last three or four years in the matter of lay-overs at away from home terminals.

This Article makes no exception for assigned runs (Record 5326), although such assigned runs may have been bid in by the men with full knowledge of the lay-overs provided by the schedules.

Mr. Cadle admitted that the rule as drafted (Record 267) covered regular passenger as well as way freight assignments, although he said he would not consider the rules should apply, and (Record 269) there should be some reasonable exception to cover such a situation, and that there should also be excepted work trains and snow plow service (Record 276).

The only cases in which any legitimate ground for complaint can arise concerning length of time away from home terminal is in pool or unassigned freight service. Mr. Trenholm testified (Record 5334) as to the practical difficulties of at all times adjusting the distribution of crews in such a manner as to make possible their being held at away from home terminals a uniform time. Certain operating divisions are subject to fluctuations in volume of business which is seldom balanced, and the necessity of meeting the public demands, making connections with other companies, and a great variety of conditions prevent the carrying out of any hard and fast rule as to when crews can leave their distant terminals consistently with the proper handling of business. Both Mr. Keefe (Record 3545) and Mr. Trenholm (Record 5325) admitted frankly that the entire burden ought not to be borne by the men when required to stay at away from home terminals an unreasonable number of hours; but both witnesses directed attention to the difficulty of arriving at a uniform rule that would fit all conditions and requirements in so vast a territory. Mr. Trenholm suggested as a reasonable and equitable

rule (Record 5327) which would protect the men, first to allow them the ten hours' rest, which the men would ordinarily require upon their arrival at the distant terminal, and thereafter guarantee them a minimum day's pay at the expiration of each twenty-four hours they are so held. He gave as his opinion (Record 5331) that the rate a man is paid while held at a terminal, not performing any service, should be a fixed rate and should not fluctuate with the last engine he was on, or according to the last service he performed, and that as between two men at the same terminal, with no work for either of them, there is no reason why one man should receive a higher rate per hour than the other. He pointed out (Record 5334) that in the territory where the traffic is heaviest and more evenly divided in each direction, the problem of getting men to their home terminals is easier of solution than where the traffic is largely in one direction, and that this would justify a longer spread in Western territory than in the East, where the following award was made in the Eastern Engineers' case, on November 2, 1912: (Award 80):

"Engineers in unassigned freight service held twenty-eight hours at other than designated home terminals without performing service, are to be paid overtime rates as follows:—Ten hours for the first twenty-eight hours so held, and ten hours additional overtime for each complete 24 hours so held thereafter, provided that this regulation does not apply to engineers delayed by reason of compliance with the law, or obstruction of the line through act of Providence."

In its supplementary explanation the Board said (Award 85):

"The Award regarding the allowances made when men are held away from their home terminals is in general accord with the principle now in force on several of the important roads in the Southern district."

The question presented by this proposed Article VIII was involved in the arbitration under the Newlands Act between the Chicago, Burlington and Quincy Railroad, and the Order of Railway Conductors and the Brotherhood of Trainmen, in which the award was handed down on February 19, 1914, as follows: (Award, p. 37):

“Proposed by Employees:

QUESTION THIRTY-TWO.

Rule 63 (c).

“Pool crews held at their away from home terminal twenty-four hours or more from time of arrival will be paid ten hours’ pay for each twenty-four hours so held.

IT IS AWARDED:

Rule 63 (c).

“Pool crews will be paid 100 miles for the first 30 hours held at other than their home terminals and 100 miles for each complete 24 hours so held thereafter, except in cases of snow blockades, wash-outs or serious wrecks preventing the operation of trains.”

This award is practically identical with the provision contained in Article 22a of the engineers’ schedule on the Chicago, Milwaukee & St. Paul, as shown at page 287 of Railroads’ Exhibit 1.

Inasmuch as the only rule established on this subject in Western territory in an arbitration proceeding provides for payment at the end of the first thirty hours, and for each twenty-four hours thereafter, and inasmuch as the rule thus awarded by arbitration is in effect as to its trainmen on one of the roads parties to this proceeding, it is respectfully submitted that in no event should a rule on this subject be considered by the Board which lays down for the whole territory a rule any more rigid and inelastic than the one awarded in the Burlington case.

In connection with Articles VII and VIII, as well as in considering the recital by employes of hardships on particular trips or runs or of a particular class of service, the Board should never lose sight of the fact that these hardships are always exceptional and transitory occurrences in the occupation of the individuals affected. The man tied up between terminals today may catch the fast freight on his return trip and employes agree that men in pool service average up pretty well, the fast trips with the slow, at the end of a month or year (Record 1142, 1333).

So, too, the run more arduous than the average is simply held until seniority permits the selection of something better. Promotion through seniority takes the employes not merely from one to another class of service but from one run to another

in the same class. Therefore, the recital either of individual hardships or of the condition of a particular run should be considered in connection with and only as a part of the occupational field wherein such hardships are encountered by individuals only as exceptional incidents in their progressive advancement from apprentice to the head of the seniority list.

We direct attention to Railroads' Exhibit 13 and suggest that it be considered in connection with these proposed Articles VII and VIII. This exhibit shows that for the fiscal year ended June 30, 1913, the railroads involved paid to their engineers and firemen in freight service \$1,084,373.62 as allowances between the actual miles or hours on duty and the minimum of 100 miles or 10 hours. The above amount was paid in freight service alone and when all classes of service are considered, the companies paid during said fiscal year the sum of \$1,403,038.74 for which no actual service, either in miles or hours, was rendered by the men (Record 3766).

ARTICLE IX.

PROPOSAL.

Deadheading.

Engineers and Firemen deadheading on Company business shall be paid the same rate and on the same basis as the Engineer and Fireman on the train on which deadheading. Rules in individual schedules governing minimum day, and other conditions to apply.

Railroads' Exhibit 1 (pp. 290, 292) shows that practically every railroad involved in this movement now specifically covers the matter of deadhead service and deadhead pay by schedule provision. And this, substantially, is all that was proved on behalf of the employees in this proceeding. The only employees' witnesses who testified on the subject of deadheading were Mr. Cadle (Record 98) and Mr. Moore (Record 130), and these witnesses simply pointed out the provisions of various schedules and said nothing as to any change in labors, responsibility or nature or character of this service as compared with the time when present schedules were agreed upon; and Mr. Carter stated (Record 418) that he did not think the doctrine of increased productivity applied to this request concerning deadheading.

Railroads' Exhibit 1, showing that this subject is fully covered in all schedules, and no proof whatever having been offered

either of any hardship under any existing schedule or any changed conditions since such schedule was agreed upon, or of any reason for change therein, it would seem that the Board need give no consideration to this request.

But employes' witness Moore (Record 130) having stated that he failed to find a rule exactly the same as the one proposed in any schedule, Mr. Trenholm took occasion to point out the injustices which would be brought about under any such rule. He stated (Record 5342) that when a man is called to go out and ride a passenger train to a certain point and there bring in the train, it is proper that a combination of the deadhead trip and the service trip be made, and that there is no reason why the deadhead trip out a short distance—twenty or forty miles—should be separated from the other service; that the proposal contemplates that on the deadhead trip he receives a full day's pay; and that a man called to make a deadhead trip by taking a passenger train at the station would get initial terminal delay if the passenger train was late, because of being entitled to the same pay that the engineer pulling the train draws (Record 5343); that if you send an engine crew out on a passenger train to bring in a train tied up under the law you would have to pay a full 100 miles for the deadhead trip and a minimum day for bringing the train in (Record 5350). Mr. Trenholm said (Record 5353) that he could conceive no reason—certainly none was given by any of the witnesses on behalf of the employes—why the difference in the type or style of engine that is up on the head end of the train should affect the compensation, as this rule provides, of the engineer or fireman who was riding in a coach of that train. He recognized the propriety of provision in many schedules whereby there was a difference in the rate of a man deadheading on freight and passenger trains, because of the difference in the speed of the two trains.

No one contradicted the testimony (Record 5352) of Mr. Trenholm that the amount of deadheading necessarily differed on different roads due to the question of a balanced traffic, and to various other conditions, and all these matters should be given consideration in order to make a deadhead rule entirely adequate and fair to meet conditions peculiar to the individual roads. The proposed rule if adopted might be held to require payment for all deadheading, including that necessary for

the employe in the exercise of his seniority in selection of work and the additional deadheading resulting therefrom, as it is possible the claim might be made that all rules to the contrary, as shown in Railroads' Exhibit 1 (pp. 291, 292) were abrogated by the adoption of the proposed rule.

Because of the proposal being inherently unreasonable, and because of no testimony having been offered to show either changed conditions or any inadequacy of compensation under existing rules, we ask that the Board give it no consideration.

ARTICLE X.

PROPOSAL.

Hostlers.

At points where an average of six or more locomotives are handled within twelve hours, day or night, hostlers shall be maintained.

Positions, How Filled:

Hostling positions shall be filled from the ranks of the Firemen, and they shall be paid \$3.35 per day of ten hours or less; provided that where Hostlers are required to make main line movements, they shall be paid \$4.75 per day of ten hours or less, overtime in each case to be computed on the minute basis and paid for at the rate of time and one-half.

When such main-line or road Hostlers are paid the same rate as engineers in switching service, such position shall be filled from the ranks of the Engineers.

Meal Hour.

Hostlers shall be allowed one hour for meals between the hours of 11:30 and 1:30, day or night. Hostlers will be assigned regular meal hour between the hours named or after being on duty five hours. Should Hostlers be required to remain on duty after designated meal hour, one hour will be allowed as overtime. No Hostler will be required to remain on duty longer than six hours without having one full hour for meals.

Paragraph one seeks to take from operating officers all discretion as to the points at which hostlers shall be maintained, and to fix a rigid rule which makes no allowance for peculiarities of particular roads.

Paragraphs two and three seek to take from operating officials all right to make selection of the employes from whose ranks hostlers may be recruited, and gives to enginemen general jurisdiction over hostlers as a class.

The conditions under which hostlers are employed and the service they are required to perform are not the same at all points in the territory or at all points on the same line. The duties, labors and responsibilities vary at different points, and this subject should be treated, as it always has been in the past, as one which is wholly regulated, and to be determined by each line, according to its particular requirements.

Concerning the first paragraph of this request, which proposes to fix absolutely points at which hostlers must be maintained, employes' witness Moore (Record 134) said there is only one road which has a rule at all similar, and that is the M., K. & T. rule providing for hostlers at points where an average of eight or more engines are handled within twelve hours day or night.

During the conferences between the two committees, the Conference Committee of Managers made the following inquiries of the Committee representing the employes:

"1. How are the six or more locomotives to be determined?

"2. Is an engine handled in and out during a 12-hour period counted as one or two for the purpose of this rule?

"3. Can a hostler be assigned to duties other than hostling?"

And to these questions the following replies were made:

"Question 1. We contemplate that at points where, for any ten consecutive day period, an average of six locomotives are handled within any twelve-hour period, hostlers will be assigned; and, logically, it follows that in order to discontinue the position of hostler, the average number of locomotives handled, within any ten consecutive day period, must be less than six.

"Question 2. Two.

"Question 3. We do not contemplate that hostlers will be assigned to duties other than that of handling locomotives, or other power, in and out of roundhouses, placing them at fuel sheds, sand houses, etc., for the purpose of having supplies placed thereon, supervising the work in connection with same and taking them to and from trains."

Mr. Cadle testified (Record 295) that the manner of hostling engines differs greatly in Western territory; that there are (Record 296) hostlers who handle engines at the pit, supply with coal, water, sand, have fires cleaned, put them in round-

house, take them out, place them on designated tracks, and at some points a great variety of duties are performed by the men in connection with the care and handling of engines; fire knockers clean fires and ash pans, sometimes the hostler helper will clean the fire. He said that under the proposal (Record 300) a handyman hostling an engine at the terminus of a branch line, moving it under steam once or twice a day would be entitled to hostler's rate of pay; that any man who performs general work at an agreed monthly salary if at any time during his daily duty moves an engine under steam, would take this hostler's rate; that if in a single twelve-hour period (Record 304) there happened to be six engines at a particular point, that fact would establish that point for all time as one where roads would have to supply and maintain a hostler.

Notwithstanding the admitted diversity of work done on engines at different points between the time of arrival and departure, Mr. Carter announced a definition of the meaning of the word "hostler" as embodied in the proposal, viz: A hostler (Record 526) is a man who has charge of and is responsible for the locomotive after the road crew surrenders the engine and before they take it out again. Any man who handles an engine or is responsible for the handling of that engine, has charge of it while not operated in regular service, is a hostler. An assistant hostler (Record 532) is a man who actually hostles engines and assists the head hostler. He may be a fire-knocker, but if he does not handle engines he is not a hostler. If he handles engines he is a hostler. The proposal contemplates, said Mr. Carter (Record 1451), that where six engines are handled in a twelve-hour period, hostlers must be maintained, but that the maintenance of hostlers at points where less than six engines are handled in a twelve-hour period will be optional with the roads. He stated further, that if an award should be made in conformity with the request (Record 1458), and a company for the first time provided a hostler at a certain point, in obedience to the award, such hostler could not be required, as a part of his duties, to build or knock fires, or place supplies on engines.

The railroads filed for the information of the Board, statement marked Form 42, showing rates of pay and duties of various employes who move engines under steam, including those who regularly devote the whole or any part of their working

time to such duties, with the explanation that there appeared on some of these forms names of men who did not actually handle the engines under steam (Record 4493, 4496); and to show the great variation not merely as between different railroads, but on the same railroad system, Mr. Clewer (Record 4488 to 4535) described the differences in duties and in rates of pay at the highly specialized terminals, at smaller terminals where the work could not be so completely subdivided, and at still smaller points where but one or two engines were handled. In substance, Mr. Clewer pointed out that at an important terminal like the Forty-seventh street roundhouse in Chicago of the Rock Island, the work on engines was subdivided between different employes; at other points, fewer subdivisions of this work are made; at still other points one man will do all of the work; and at the end of branch lines, where there are but one or two engines to care for, an engine watchman does all this work (which takes only an hour or two a day), and puts in the balance of his time in other work.

In addition to describing the varied practices on the Rock Island, Mr. Clewer testified (Record 4510) that the Burlington, the Santa Fe, the Soo Line, the Illinois Central, and the Northwestern have practically the same variations in practice at different points—that is, at important terminals the work may be specialized so as to provide for a hostler at a busy terminal no other work than the handling of engines under steam, and at other points, in addition to or in connection therewith, he may do the work of cleaning fires, working about the cinder pit, taking coal and water and spotting the engines; and at still smaller points, he may do all this work in connection with one or two engines and fill in the rest of his day's work in duties around the roundhouse in connection with the pump, sweeping out the station, or any of the varied duties which may be required to meet local conditions.

Mr. Willsie (Record 4622 to 4640) described the differences in duties in the handling of engines at different points on the Burlington. As on the Rock Island, the work is specialized into numerous subdivisions at the large and busy terminals and through various gradations works out to the points where the man in charge of a little roundhouse has entire charge of the engine from the time it gets in until it goes out. At such points (Record 4625) such a man not only knocks the fires and cleans

the ash pans, but does minor repairs, fires up, takes coal, water, sand and supplies. As on the Rock Island, the wages paid these men varies commensurately with the duties they perform at different points; at quite a number of places engine watchmen are on a monthly salary and are required as a small part of each day's work, to handle an engine under steam.

Mr. Green testified (Record 3588, 3590) that on the Louisiana & Arkansas this hostler proposition, if granted, would change the expense on that road from \$200 to \$1,700 per month; and in compliance with the suggestion of Mr. Shea, Mr. Green furnished detailed statement as to the exact manner in which this additional expense would be imposed upon the Louisiana & Arkansas.

Mr. Higgins pointed out (Record 4677 and following) that in endeavoring to ascertain the purpose and object of the rule "that engines shall be handled at terminal points by hostlers," appearing in the Missouri Pacific schedule since 1885, he was advised that this rule was originally granted as a remedial measure and to relieve men from the claimed hazards of going on foot to the roundhouses and yards which were then located in outlying districts; but instead of being a remedial measure, this alleged hostler's rule has simply worked out to be a special provision for handling the engine from the roundhouse to the train (Record 4689), the practical effect of which has been that the Missouri Pacific for every run over certain districts by its engineers pays one hour in addition to the mileage of the trip and which its competitors in the same territory do not pay (Record 4690). If on the Missouri Pacific the "engines-shall-be-handled-by-hostlers" rule is, as Mr. Higgins says, really "not a hostler rule," but "a special provision for handling the engine, if you please, from the roundhouse to the train," will not like result be brought about should this or any other Board make an award that the operating officials "shall maintain hostlers" at definite places?

Mr. Trenholm testified (Record 5355) that on the road with which he is connected, where hostlers or engine dispatchers are employed, their scheduled rates of pay are covered by the contracts with the engineers and the firemen, but that the railroad is left to determine when the volume of the business justifies the employment of hostlers. He further testified that the claim now

advanced that a man who at any time moves an engine under steam becomes a hostler so as to take a hostler's rate, has never been advanced under the schedule on his road, and that at many of the smaller outlying points different people in connection with other duties move engines under steam. He said this may be a handyman (Record 5356) at one point, the roundhouse foreman at another, or any one who is considered competent by the mechanical officers, who either employ a foreman or some one to do certain work including the moving of engines if that work is to be done at that point.

Not only has there never been any claim on the Omaha road (Record 5356) that engine watchmen, foremen or handymen were hostlers, but it has been generally the practice in the West to consider and treat as hostlers only such men as those who devote substantially all of their time to the moving of engines at terminals (Record 5357).

Mr. Trenholm also pointed out (Record 5368, 5369) that the handling of any particular number of engines in and out of a roundhouse during a given period did not uniformly measure whether the handling of such given number would or would not provide a day's work; that the arrangement of roundhouse, coal chutes, water tanks, sand houses, turn tables, etc., vary as between different roads and as between different points on the same railroad; that at one point with the superior appliances furnished him a hostler may handle many more engines than he could at another point; and therefore for any one to say that any given number of engines is the work of a hostler will certainly not apply universally in the entire territory.

Jurisdiction Over Hostlers.

An interesting colloquy between Mr. Carter and members of the Board is recorded at Record pages 4562 to 4580. At pages 4574 to 4576, in response to a question by the Chairman: "Is there anything here which would enable the railroads, in the future, if they so desired, to take some worthy man who was in the Mechanical Department, and use him as a hostler?" Mr. Carter replied, substantially, that even though a man was a machinist (but never a fireman) and had been experienced in the building of locomotives, knew all about them and knew how to handle them, and the railroad company wanted to use

him as a hostler, this could not be done, if this rule was adopted, because all hostler positions under the proposal must be filled from the ranks of the firemen. This was admitted to be the practical effect of the rule for all future operations, although Mr. Carter admitted (Record 4579) that the Constitution of the Firemen's Brotherhood would admit to membership in that organization men whom this rule would not permit the railroad companies to employ as hostlers.

While there has been much loose talk about employing "competent" men to fill hostling positions, no one has given any specifications as to what there is about the work of the firemen which *per se* qualifies the fireman to handle an engine more competently than one who in any other line of work has had equal opportunity to observe the proper manner of handling a locomotive.

To be sure, there has been proof that firemen were required to pass certain mechanical examinations in order to be entitled to promotion, but we do not understand that the instant request contemplates that hostling positions shall be contingent upon passing any particular form of mechanical examination, for such a rule would give equal opportunity to recruits from the machine shop and recruits from the ranks of firemen.

It is, at least, an interesting, and, we believe, a significant fact that neither one of the two hostlers who were called as witnesses on behalf of the employes had ever served as fireman. These two witnesses were Mr. Holloway (Record 1423) and Mr. McClory (Record 1445). To be sure, certain other witnesses testified that they had at different times performed hostler's work, having bid in such work in the exercise of their seniority rights; but Mr. Holloway and Mr. McClory are the only two witnesses who describe their occupation as "hostlers" and Mr. McClory obtained the necessary knowledge which qualifies him to act as hostler while he was employed as machinist's helper (Record 1445) on the Chicago & Northwestern. Mr. Holloway says (Record 1426) that a man familiar with shop work and having knocked fires and helped the hostler, becomes competent to act as hostler when he has been put on an engine and learns to run it; that the experience which he obtained at the Western Avenue roundhouse of the Burlington qualified him to perform his duties in moving engines.

The testimony of these two witnesses is precisely in line with the observations of Mr. Clewer (Record 4502 to 4504) who describes the working up of a roundhouse employe through experience in the roundhouse to the position of hostler's helper, where he continues to work for two or three months more; if he is a bright fellow he qualifies in a few months' experience to handle the locomotive around the roundhouse, his experience as helper, in throwing switches, spotting the engine on turntable and becoming familiar with all the surrounding conditions at the terminal giving him greater familiarity with these conditions than one whose experience has been on the road. Mr. Clewer's opinion (Record 4506, 4507) is that the knowledge acquired around the roundhouse as to location of turntable, cinder pit, herding tracks, etc., are all material to make a good hostler, and that permanent men at the terminals, who know the time of arrival and departure of engines and the usual conditions surrounding the roundhouse work, give more efficient service than men who simply use those positions as a step in the ladder of promotion to road service. So, too, under present practice on the Rock Island, road men who have become incapacitated for road service may be given hostling positions entirely independent of seniority and this practice the rule proposed would prevent (Record 4561).

Mr. Willsie's contention (Record 4627) also is that at large terminals there are a good many men in the roundhouse force who have the necessary qualifications to become good hostlers; experience about the shops, with the opportunities to become entirely familiar with the work, enables railroads to qualify hostlers through this course of training, and this course has been entirely satisfactory on the Burlington. As Mr. Willsie puts it (Record 4632):

"We have just as good hostlers, I believe, on the Burlington, as any railroad. They have been operating now for a great many years, to my certain knowledge, about thirty-five years, and some of the hostlers at Galesburg, which is the division point I did most of my work out of, we have hostlers who have been in service from twenty-five to thirty years, who were brought up from the roundhouse ranks. I cannot see where making a hostler out of a fireman, he would be any better man than the men we are getting from the

roundhouse service, neither can I see how it is going to make a better engineer out of a fireman, to do service as a hostler."

Mr. Trenholm expressed a similar opinion (Record 5360) where he said:

"Of course, a fireman having served some time as a fireman becomes fully competent to be a hostler and handle an engine. Any other man working around an engine in a roundhouse, becoming familiar with it, is equally competent to handle the engine, with the same experience."

The proposed inelastic rule requiring that "hostlers' positions shall be filled from the ranks of firemen," would deprive such railway companies as now have provisions in their schedules permitting the filling of hostlers' positions by worthy incapacitated road engineers or firemen (Record 1468) from exercising such privileges—seniority would govern.

Rates of Pay, Hours, Overtime, and Meals.

Railroads' Exhibit 1, page 303, shows that some roads pay different daily rates at different points on the same system, supposedly because of differences in the service at these different points, while many roads have a fixed monthly rate of pay for hostlers. Of Western roads whose schedules contain provisions as to hostlers' pay, 67.3 per cent. fix the basis of the day's work as 12 hours. Mr. Willsie (Record 4640) testifies to a spread at different points on the Burlington from 17½c to 25c an hour, when men are paid on an hourly rate, and that at some points a hostler's pay consists of 11 hours and at other points 12 hours (Record 4650). The Burlington also pays a fixed monthly rate at certain points.

It is pertinent to here point out that the ultimate result of the adoption of the employes' proposal would be, after having stated where hostlers are to be maintained and from what preferred class of employes they are to be taken, to change the basis of pay, on a number of roads, from a monthly basis of twelve hours per day (and, as is usually the case with men drawing monthly salary, no overtime provisions are stipulated) to a basis of a per day wage with a minimum of ten hours and overtime thereafter at the rate of time and one-half.

Mr. Trenholm stated (Record 5374) that the usual way is to have a 12-hour shift of hostlers and that (Record 5370, 5371) the most pressing and busiest time for hostlers is when switch crews are relieved for their meal hours and when the switch crews are changed. Mr. Trenholm concedes (Record 5687) that there should be a regular meal hour established for hostlers and maintains that in many places this is the practice, but that the particular hour established must be made to suit local conditions and be so adjusted that the hostlers may take their meals at different hours than the hours fixed for switch crews.

He further testified that he had never heard of any complaint either through the organization or otherwise of any abuse or fault found of the present meal hour for hostlers (Record 5374), but directs attention to the fact that railroad companies cannot relieve both the enginemen and hostlers at terminals at the same time and that such a situation can be handled equitably only by giving due consideration to all surrounding conditions and making the arrangements to fit such conditions at the particular points.

In the Eastern Firemen's case the Board was not asked to lay down any rule as to points at which hostlers shall be maintained or to prescribe specifically that hostlers' positions shall be filled from the ranks of firemen. The Board was not asked to fix a meal hour limitation for hostlers and but 6.5 per cent of the mileage has meal hour provision for this class in their schedules (Railroads' Exhibit 1, page 297). They were, however, asked to accept a definition proposed by the Firemen's organization for the term "hostlers," but no such definition was made and the award simply was as follows (Award 4):

(c) HOSTLERS.

Hostlers, per day of ten (10) hours or less.....	\$2.40
If hostlers are employed in handling engines between passenger stations, and roundhouses or yards, or on main tracks, they will be paid, per day of ten (10) hours or less.....	3.25
If men are employed to assist hostlers in handling engines between passenger stations and roundhouses or yards, or on main tracks, they will be paid per day of ten (10) hours or less.....	2.50

Yet the rulings of the Hon. Charles P. Neill on questions which arose as to the application of the foregoing finding (Copy of which rulings has been filed with the Board) demonstrate conclusively that the establishment in this proceeding of any rate or

rule whatever pertaining to hostlers will practically bring about the condition inquired about by Mr. Nagel (Record 4572) viz: of lifting out of their present jobs the men recruited from round-house ranks who now hold positions which, from the viewpoint of the engineers and firemen, are underpaid and which positions, if and when given the rate of pay deemed proper by the two organizations, will be promptly appropriated by such organizations for their firemen or engineer members.

We most earnestly urge that the Board read carefully Dr. Neill's rulings above referred to, together with the colloquy between the Board and Mr. Carter from pages 4565 to 4585; and in the light of the real intent and purpose of this "hostlers' request," which we believe to be disclosed by this colloquy, we urge that the Board decline to make any ruling which practically must result in eventually closing to shop and roundhouse forces all possibility of securing employment in the positions which they are now competently filling.

ARTICLE XI.

PROPOSAL.

Surprise Tests.

That the practice of conducting surprise tests by turning switch lights and placing red lights, or flags, unaccompanied by torpedoes, beside track, or wiring down automatic signals to proceed position, be eliminated.

The attitude of the Conference Committee of Managers on this question is completely stated (Record 1728) in the reply made to the Employees' Committee, as follows: "Properly conducted efficiency tests are necessary to safe operation; should always have due regard to safety of employees. Beyond statement of this principle schedule should not make specific provisions concerning tests."

In view of all the talk concerning endangering of life and limb by surprise tests, it is rather startling upon analysis of the 7300 page record to discover that only two witnesses were placed upon the stand to testify concerning their personal experiences with any so-called surprise tests. These two witnesses were Engineer Young of the Union Pacific and Fireman Modenbach of the Rock Island. Engineer Young testified (Record 1324):

"Mr. Stone: Have you ever had any switch lights turned red in your face?

"Mr. Young: Yes, sir.

"Mr. Stone: I wish you would explain to the Board how it happened.

"Mr. Young: The light was not turned red in my face, but it was left red. One night at New Cambria, I was on the fast passenger train, it was about some time in March, 1913, and another one at Salina, this same Spring, a red switch was turned.

"Mr. Stone: This one at New Cambria, that you speak of, was the light turned completely around there, turned red?

"Mr. Young: No, it was turned a little bit cross-ways, so it could not be seen as far as it should have been, due to having been hung on one socket, by one fork of the stand, which would allow the wind or the weight of the lamp to swing it around perhaps a little bit, or enough to get it out of focus."

On cross-examination, Mr. Young said (Record 1327) :

"Mr. Sheean: So that, in both instances, as far as the eye could see, the light was turned at danger?

"Mr. Young: Well, as soon as I could see it, the one at Salina was in good condition, and I saw it a long ways; it was a good light, and well turned, and parallel with the track.

"Mr. Sheean: And as far as your eye could reach there?

"Mr. Young: Yes, sir.

"Mr. Sheean: You could see the red light?

"Mr. Young: As soon as I got the location.

"Mr. Sheean: In the other instance, the track itself was straight for a distance of at least two miles before you approached this place?

"Mr. Young: Yes, sir."

It would seem that the testimony of Mr. Young did not tend to show any endangering of life and limb; but the testimony of Fireman Modenbach described an occurrence which he said (Record 1684) actually resulted in injury to the engineer who was subjected to the surprise test. However, this engineer, when produced before the Board not only denied (Record 3396) that he had ever been injured in a surprise test but further denied there had been any such occurrence as the one narrated by Fireman Modenbach.

In view of the fact that this is absolutely all the evidence there is in the record of any test or tests which can be claimed by the remotest stretch of the imagination to have a tendency to inflict injury or even cause unnecessary fright, we think it not unfair to suggest that the alleged elimination of danger cannot be the real motive for seeking to tie the hands of operating officials in making tests as to fidelity and watchfulness of employes.

The request that "wiring down automatic signals to proceed signal position, be eliminated," was manifestly inspired, not because of any danger encountered by the engineer through these tests but because on the Santa Fe (Record 5426) a Trainmaster penalized certain engineers with reprimands for failure to observe that the signal did not go to "stop" position upon their engines passing it.

But it seems unnecessary to argue that the real purpose of this proposal is in reality to tie the hands of operating officials and not merely to eliminate danger, in view of the following colloquy shown at page 5420 of the record:

"Mr. Sheean: Let me say here and now, if the organizations, and I know, while I am speaking hurriedly, that I am speaking with authority, if the organizations will say that what they mean by surprise tests are really tests which endanger men's lives, we will here and now agree to read into the Award by agreement, that surprise tests thus defined shall be discontinued. Now, if that be their definition of surprise tests, the matter is ended.

"Mr. Stone: Mr. Chairman, this is neither the time nor place to throw a life-line to the Conference Committee of Managers. That all went over the dam long ago, and it is before this Board for decision."

Having frankly stated its position on the question here presented, the Committee representing the railroads passes to the Board the responsibility which the Committee was unwilling to assume, of limiting the sound judgment of operating officials as to the form of tests which reasonably should be made to determine whether duties which involve the public safety are being vigilantly performed.

ARTICLE XII.

PROPOSAL.

Assistance for Firemen.

On all locomotives in freight service where but one Fireman is employed, and on all locomotives in passenger service, coal will be kept where it can be reached by the Firemen from the deck of the locomotive. Coal of the proper size for firing purposes will be placed on all tenders.

Railroads' Exhibit 1, page 310, shows that practically all of the schedules in Western territory provide that coal shall be broken to proper size before being placed on tenders. Only 8.7 per cent. of the mileage in Eastern territory and but 9.1 per cent. of the mileage in Southeastern territory have such a provision.

Identical conditions of service cannot be brought about on many types of engines, each performing varying service on different lines in localities under dissimilar operating conditions.

Mr. Tollerton testified (Record 4242) that on some 2,000 observations in Western territory, only one per cent of the fireman's time was taken in pulling down or shoveling down coal. He pointed out that on the older and smaller power, now more generally used on branch lines, the distance from the deck of the engine back to the coal space is greater than on the more modern engines, so that this hard and fast rule would, in reality, have its severest application on these smaller and older types of engines on which it has never been claimed the work of the fireman was burdensome.

Mr. Tollerton further testified as to the constant improvement, both in the design of the tenders and in the installation of new coal chutes, whereby coal is generally within reach of the fireman; and Mr. Trenholm (Record 5427) also testified to the fact that the situation in this regard was better than in 1910, so that it is now very seldom that the fireman has to shovel coal down in the tank of his engine (Record 5701).

Manifestly, runs which are peculiarly burdensome for the fireman should be left to the individual roads and their men for adjustment in such manner as will fairly meet the peculiar conditions of such line.

In the Eastern Firemen's Arbitration proceedings, the following article was submitted to arbitration:

Article Six. Assistance for passenger and freight firemen. On all engines in through freight service where but one fireman is employed, and on all engines in passenger service, coal will be kept where it can be reached by the fireman from the decks of all engines.

No rule on this subject, however, was contained in the award handed down April 23, 1913.

ARTICLE XIII.

PROPOSAL.

Two Firemen.

On coal-burning locomotives weighing 185,000 pounds or more on drivers, when **used in freight service, two Firemen will be employed.**

It is the view of the Conference Committee of Managers that the question of the necessity of two firemen on one engine cannot be determined merely by the weight on drivers of such engine, regardless of character and length of run, tonnage handled, quantity of coal consumed, interruption or continuity of service, speed at which run is accomplished and climatic conditions, all of which certainly have a material bearing on the arduousness of the fireman's work.

The railroads recognize that there may be particular conditions or runs where the fireman needs assistance and in certain territory on certain types of engines assistance is now provided on certain runs on some of the roads (Record 3471-3472).

In order that they might have accurate information as to the amount of physical labor required of firemen on the heaviest engines in use on the different roads, the railroads caused a number of observations to be made on engines of the heavier type to ascertain whether on the engines on which two firemen are requested the physical labor required of the fireman was beyond the ability of a single man. Mr. Tollerton introduced as Railroads' Exhibit 35, in graphic form, a tabulation of these observations (Record 4287) showing that on the average about 23 per cent of the fireman's time is taken in actually shoveling coal on these heavier engines (Record 4299). Mr. Tollerton stated (Record 4301) that he did not wish it to be inferred from

his testimony that he did not consider the fireman doing his full duty at all times, the same as the locomotive engineer, but that his intention was to try to show by his testimony that on these locomotives where they are asking for two firemen, the work is not now beyond the capacity of one man. Again, Mr. Tollerton stated (Record 4404) that he does consider both the engineer and fireman working and performing sincere and honest duty all of the time. This statement, he reiterates time and again (Record 4418, 4419) when there was apparently an effort on cross-examination to create the impression that his testimony was intended to show that the fireman is performing duties but part of the time.

That the necessity for two firemen on any engine could not be determined merely from its weight on drivers was the conclusion reached in the Eastern Firemen's Arbitration, in which the request was "except as otherwise provided, on all engines weighing 200,000 pounds or more on drivers, when used in through freight service, two firemen will be employed," and in which the award was:

"Article Six. When a second fireman is deemed necessary on any engine, or assistance is deemed necessary on any engine where one fireman is employed, the matter will be taken up with the proper officials by the Firemen's Committee. Failing to reach a settlement the matter shall be referred to an Adjustment Commission, to be composed of five (5) persons, two (2) of whom are to be chosen by the Railroad Company, two (2) by the Firemen's Committee, and one (1) to be selected by the four (4) thus chosen, who shall be the Chairman of the Commission. Should the four (4) men fail to agree upon the fifth, then three (3) days after the last of the four (4) is selected, the fifth man shall be named by the Presiding Judge of the United States Commerce Court. If, for any reason, the selection of the fifth man cannot be made by the Presiding Judge of said Court, he shall be named by the United States District Judge of the District in which the controversy may have arisen. All expenses incurred in connection with the settlement of such matters shall be borne equally by the two (2) parties to the controversy."

And in the same award it will be noted that by Article 2, it was provided:

“When two firemen are employed on a locomotive as a result of the application of Article 6 hereinafter, the rates of pay to each fireman shall be as follows:
 Weight on Drivers, 100,000 up to 250,000 lbs. . . . \$2.75
 Weight on Drivers, over 250,000 lbs. 3.00”

In other words, where two firemen are employed the minimum rate is provided for each fireman practically up to the largest type of engine now in service.

We direct attention to this fact because of its significance in fixing rates on oil burning locomotives. If this Board reaches the consideration of the question of establishing rates of pay based on weights on drivers, should not recognition of the principle established by the Eastern Award in fixing a minimum rate where two firemen are employed, cause this Board to continue a differential on oil burning engines, and logically should not the rate for oil burners be the minimum rate for the class of service in which used without regard to weight on drivers?

Since the testimony clearly demonstrates (Record 4313, 4316, 4520, 4646) that the work on oil burners is in no wise affected by the size of the engine, the duty and responsibility of the fireman being simply the duty which all firemen have on the smallest engine in that particular class of service, with less physical effort than the fireman on the smaller engine, is not the logical position that on all oil burning locomotives the rate of pay of the fireman should be the minimum rate for the class of service in which such engine is engaged?

ARTICLE XIV.

PROPOSAL.

Miscellaneous.

Cleaning of Locomotives.

On railroads where Firemen are required to clean locomotives, they shall be relieved of such service.

Setting up Wedges, Filling Grease Cups and Cleaning Headlights.

Where Engineers and Firemen are required to set up wedges, fill grease cups, or clean headlights, they shall be relieved of such service at all points where roundhouse, or shop force, or an engine watchman is employed.

Placing of Supplies on Locomotives.

Where Engineers and Firemen are required to place on or remove tools or supplies from locomotives, fill lubricators, flange oilers, headlights, markers or other lamps, they shall be relieved of such service at all points where roundhouse, shop force, or an engine watchman is employed.

Cleaning of Locomotives.

No witness was called on behalf of the employees who testi-

fied as to any practice on any Western railroad where either the engineer or fireman were called upon to clean engines. Mr. Tollerton testified (Record 4428) that both engineer and fireman had been relieved of practically all duties with reference to engines and that there are some short runs and small engines where the engineer and fireman receive a day's pay for possibly three hours' work, and that under these conditions he does not think it unreasonable for the railroads to ask the engineer and fireman to perform this work, thereby contributing in part, to making up the day for which they are paid under the schedules.

Setting up Wedges, Filling Grease Cups and Cleaning Head-lights.

Mr. Tollerton (Record 4256) said that on branch lines, engineers look after the setting up of wedges; that engine watchmen, as called for in proposal, are not competent to do this work; that the request, if granted, could not be worked out without labor complications, inasmuch as some companies have an agreement that either a machinist or locomotive engineer will adjust wedges.

Mr. Trenholm testified (Record 5436) that there is a variety of practices in the territory, some roads require engineers to do some of these things, depending largely upon conditions of the railroads, roundhouse facilities, etc. He agreed with Mr. Tollerton's opinion that an engine watchman was not a proper man to set up wedges and do work of that class (Record 5439), and that the proposal, if awarded, would require railroads to maintain skilled mechanics at outlying points to do this work, where there is no actual necessity for so relieving an engineer, as his work is usually light at such outlying points. The setting up of wedges is something the engineer is entirely competent to do and engineers should be paid for all this work (Record 5440) but if his total miles run is less than 100, his total time on duty less than he is being paid for, the engineer can properly be called upon to do this as a part of his day's work.

Filling Lubricators, Etc.

Mr. Tollerton (Record 4261) said that it is just as important in his judgment for the lubricator to be working properly at all times for the successful operation of the locomotive as it is to open the throttle; that the only ones capable of caring

for the lubricator properly are the engineer and fireman; that the lubricator should be taken care of while the engine is warm and filled so that it can be blown out under steam; that there are no other employes connected with the roundhouse capable of properly taking care of the lubricator like the engineers and firemen and this is one of the duties they should perform. On the Rock Island the engine crew are required to fill the classification lamps, and this practice Mr. Tollerton thinks proper (Record 4261).

Mr. Tollerton stated (Record 4428) that he never heard the question brought up as to whether engineers objected to doing the work enumerated in this proposed Article XIV, or simply objected to doing it without additional compensation. The testimony discloses that the practice generally has been that described by Engineer Young of the Union Pacific (Record 1336) who said that in fixing rates that have been made during all the years he was employed by the Union Pacific, such rates have always included the work from the time the man went to work until he got through and that engineers have been relieved of considerable work, such as filling grease cups, taking care of the headlights, setting up wedges, etc. The work enumerated in this proposed Article XIV being of a kind and character which it is not improper to call upon the engineer and fireman to do, it seems to us perfectly clear that no rule need be laid down on any of the matters covered by proposed Article XIV, in case this Board adopts the rule laid down in the Eastern Arbitrations whereby the compensation of both engineers and firemen shall begin at the time they are required to report for duty and continue until their final release from duty.

ARTICLE XV.

PROPOSAL.

Official Record of Weights on Drivers.

For the purpose of recording weights on drivers, each railroad, parties to this agreement, will permanently post bulletins at all terminals showing accurate service-weights of all locomotives.

In Western territory 215,000 pounds on drivers effects a change in the rates of pay of engineers and firemen. Some

roads have other rates based on weights on drivers, but the only basis uniform as to all roads in Western territory is that of 215,000 pounds.

All railroads agree that their engineers and firemen should be fully informed as to any matter which may affect their rates of pay; and the railroads interpose no objection to any satisfactory method of furnishing this information.

Mr. Tollerton testified (Record 4264, 4265) that with one exception none of the railroads in the West are equipped to accurately weigh locomotives, and that the railroads themselves accept the builder's weights; so that in practice it would be impossible to comply literally with the rule unless the men accepted the historical weights of the engines.

Mr. Trenholm testified (Record 5442, 5445, 5726) that there was no secrecy as to the historical record of all engines, and no objection to furnishing the men this information.

ARTICLE XVI.

PROPOSAL.

Throwing Switches and Flagging.

Engineers and Firemen will not be required to throw switches, flag through blocks, or fill water cars.

The only part of this proposal concerning which the employes offered any testimony was as to the throwing of switches. Three employes' witnesses testified on this subject. Engineer Jones of the Southern Pacific (Record 1617) recited the fact that firemen in helper service had to throw switches as one of the reasons justifying the claim that helper engines should be paid through freight rates. Fireman Kuehl of the Burlington (Record 1861, 1874, 1875) described the work of the firemen in passenger service who are required to throw switches between passenger-depot and roundhouse, one mile distant from the depot at Savanna, and of the firemen in suburban passenger service at 12th street, Chicago, who are required to throw a switch which is between the main-line switch and the roundhouse. Fireman Baner of the Chicago & Western Indiana (Record 1981, 1986) tells of the firemen throwing switches between the roundhouse at 83d street, where the engine crew

takes the engine, and South Chicago, where the engine works in switching service. The yard at which the switching is done is at South Chicago, where the yardmen report, while the engineer and fireman take the engine from the roundhouse at 83d street and proceed light to their day's work at South Chicago. Mr. Banser says (Record 1987) that the yard engines which go from 83d street to the yard at South Chicago are the only cases he knows of in which the fireman throws switches.

It would seem that this testimony could hardly justify an award covering this entire territory, especially when there has been no effort to contradict the figures shown in Railroads' Exhibit 3, sheet 2, that this Article XVI, in a single month, would place an added burden on the railroads of \$80,381.98, which burden would fall largely upon the railroads which have helper service in which the pay is shown by pay-roll figures to be extremely high.

Mr. Trenholm testified (Record 5448) that the effect of this Article XVI would fall most heavily on the roads in mountain territory; that helper service has been built up and rates made commensurate with the work required in this service, and the throwing of switches by firemen on helper engines is a very small item in the work of the men, but would run into large sums of money to the railroads; ordinarily where helper firemen throw switches is on coming back light with the engine; possibly they have to throw two or three switches to get on the proper track and to get back; there is nothing arduous about it; it is an operating practice which seems reasonable, and there is no practicable way of relieving the firemen except to put another man on the engine to do this very small amount of work.

We submit that it is very significant that in the only class of service where this work is required of firemen to any appreciable extent, but one witness was produced on behalf of the employes, and he, instead of suggesting that the practice should be discontinued, spoke (Record 1616-1617) of the fact that the fireman in helper service was required to throw switches as one of the reasons for paying the firemen in helper service through-freight rates. This testimony clearly corroborates the statement of Mr. Trenholm that rates in helper service have been built up commensurately with the requirements of such service in different localities and is exactly in line with the position taken

by the Firemen in the Eastern Arbitration, in which the brief on their behalf stated as one of the reasons for the rates requested in Pusher and Helper Service:

“The Pusher and Helper Fireman is required to also perform the duties of flagman or brakeman, there being no conductor, flagman or brakeman with a Helper or Pusher Locomotive.”

GENERAL CONSIDERATIONS.

In the foregoing, we have attempted to define the issues and to state the arguments of the railroads in support of their positions. But from the outset the representatives of the railroads have appreciated that in a proceeding of this character, in which the public interests are involved, the railroads were under obligation not to confine their evidence narrowly to any technical issues, but to present to the Board all the facts which would enable the Board to obtain a complete understanding of average conditions in the territory affected, in order that reasonably just comparisons might be made with compensation of other railroad employes who have similar duties and responsibilities, with the compensation of engineers and firemen in other territories, and with the compensation of employes in other crafts and trades.

The first step in making such comparison is, of course, to ascertain what the present employment of engineers and firemen in Western territory means to the individual in terms of compensation,—what is the base, in terms of compensation to the individual, on which the men ask increases to be placed. Manifestly this starting point or base must be the pay-roll at the time of the presentation of the demands for increase. Therefore the railroads have produced and filed (Railroads' Exhibits 26, 27, 28) a transcript of the pay-rolls for the month in which the demands were presented, which gives the names and earnings of every individual who drew any sum whatever for services as an engineer, fireman, motorman or hostler in the month of October, 1913. The information thus assembled in Railroads' Exhibits 26, 27 and 28 is summarized in Railroads' Exhibit 29. Counting all extra men, regardless of the amount of their earnings, and excluding not all the men who laid off of their own accord, but only those men who laid off of their own accord to such an extent as to bring their earnings as engineer

below \$100, as road fireman below \$70 and as yard fireman below \$65, Sheet No. 2 of said Exhibit 29 shows that of the 25,043 engineers included in such summary, the average monthly wage was \$160.99. Of those engineers 5,646 of the passenger class averaged \$180.39; 8,984 of the through or irregular freight class averaged \$163.68; 3,390 of the local or way freight class averaged \$166.88; and 5,213 of the yard class averaged \$129.86.

Included in the summary shown on said sheet 2 are 24,279 firemen; and the average monthly earnings of this total number was \$100.63.

5,609 firemen of the passenger class averaged \$112.93.

8,863 of the through freight class averaged \$102.61.

3,218 of the local or way freight class averaged \$104.87.

4,786 of the yard class averaged \$78.08.

On sheet No. 4 of said Exhibit 29 (which includes both engineers and firemen), 2,386 are shown to have earned between \$150 and \$158.32.

2,108	earned between	\$158.33	and	\$166.65
1,877	"	"	166.66	" 174.99
1,780	"	"	175.00	" 183.32
1,601	"	"	183.33	" 191.65
1,371	"	"	191.66	" 199.99
1,071	"	"	200.00	" 208.32
869	"	"	208.33	" 216.65
641	"	"	216.66	" 224.99
466	"	"	225.00	" 233.32
343	"	"	233.33	" 241.65
228	"	"	241.66	" 249.99
134	"	"	250.00	" 258.32
94	"	"	258.33	" 266.65
65	"	"	266.66	" 274.99
41	"	"	275.00	" 283.32
34	"	"	283.33	" 291.65
16	"	"	291.66	" 299.99
17	"	"	300.00	" 308.32
11	"	"	308.33	" 316.65
9	"	"	316.66	" 324.99
10	"	"	325.00	" 333.32
3	"	"	333.33	" 341.65
1	"	"	358.33	" 366.65

Railroads' Exhibit 30 shows, for every railroad in the movement, as to each class of assigned service in October, 1913: (a) the average pay per man; (b) the highest wages paid one man, and (c) the lowest wages paid one man working full time.

To meet the possible claim that the earnings for a single busy month were not fairly representative of the yearly earnings of the men in different classes of service, there was presented the actual pay-roll earnings covering the entire year ended June 30, 1914, of certain men in each class of service on each seniority district of every railroad involved in the movement; and these pay-roll figures of over 5,000 men were presented as Railroads' Exhibits 41 and 42. They show for the year practically the same compensation per hour and per day in the different classes of service as is shown for the month of October, 1913, on Railroads' Exhibits 29 and 30.

Among the passenger engineers whose names and detailed earnings are given in said Exhibit 41 are shown 131 men whose yearly earnings were higher than \$2,500, eleven of them having received more than \$3,000, and the highest yearly earnings being \$3,725.20.

Besides these high earnings in passenger service (admittedly the preferred service and ultimately open to attainment through seniority) Exhibit 41 shows high earnings of \$3,342.32 as engineer in freight service and \$2,842.32 as engineer in mixed service. Railroads' Exhibit 42 shows high earnings as fireman in passenger, freight and mixed service as follows: \$2,061.63 in passenger service; \$1,742.05 in freight service; and \$1,890.35 in mixed service.

We have, then, as the starting point for comparison, wage scales of October, 1913, which produced in that month average monthly earnings to all engineers in passenger service of \$183, with earnings as high as \$345.60; which produced average monthly earnings to all firemen in passenger service of \$115, with earnings as high as \$209.89; which produced average monthly earnings to all engineers in regular freight service of \$170, with earnings as high as \$358; and which produced average monthly earnings in regular freight service of \$110, with earnings as high as \$221.

Unlike any other class with which attempt at comparison has been made by the employees, seniority rights give to each

man in engine service the opportunity for promotion and ultimate selection of his own run. As stated by the Board of Arbitration in the Eastern Engineers' case (Award 22):

“The older and more experienced men may gain increase in compensation with years of service through securing the better runs under the principle of seniority.”

Compared with Eastern Engineers and Firemen:—It is submitted that Western rates and rules of engineers and firemen work out larger compensation to the men than do the rates and rules which were established by separate arbitrations in the East. This is fully shown in the colloquy between Mr. Carter and members of the Board, following the testimony of Mr. Cotter, who had set forth in detail the manner in which the Wabash, because of two-thirds of its line being in Western territory, was under present schedule paying considerably higher wages to its engineers and firemen than the wages paid by its competitors (Record 4911).

And the Western roads are paying the higher wage, notwithstanding the fact (Railroads' Exhibit 19) that the average train load in Eastern territory is over forty per cent. greater than in Western territory, and notwithstanding the claim advanced by the men that wages should be higher when train load is heavier.

It must be conceded, therefore, that comparison with rates, rules or working conditions of engineers and firemen in the East can furnish no justification for creating a still wider spread between the East and the West than the one as now shown to exist between the Wabash, which pays Western rates, and its parallel and competing lines—the Grand Trunk, Michigan Central, Lake Shore, Erie, Nickel Plate, Pennsylvania, Baltimore & Ohio, Big Four, Vandalia, Clover Leaf and Pere Marquette—which pay Eastern rates (Record 4884 and following).

Compared with other industries and with other railroad labor:—While the employes offered certain exhibits showing merely rates of pay prescribed by schedules in certain industries, all such compilations were confined to *rates* as distinguished from *earnings* (Record 586) and no investigation was made to show continuity of employment in other trades, or what any such wage scales brought in money to the men who worked

under them at the end of any given period of time (Record 583).

The Railroads introduced as their Exhibit 21 the schedule rates of pay of steamship employes, as Exhibit 22 the wage scale of telegraphers, as Exhibit 23 the rates of pay *and earnings* in railroad shop-crafts for the month of November, 1914, as Exhibit 48 the earnings in the same shop-crafts in October, 1913, and as Exhibit 24 the wage scale of conductors and brakemen.

Comparing actual pay-roll figures, not of the highest men in the various classes of service, but the average man in the intermediate class between the highest and lowest, with *actual earnings* in any other craft or industry, shows no class of employes in railroad or other comparable service who draw wages nearly so high as the amounts shown by the transcript of pay-rolls involved herein. So that the evidence as a whole, unqualifiedly supports the statement of Mr. Higgins (Record 4729) :

“I do say, however, that comparing the engineer, taking the engineer and fireman and their responsibility into consideration, and leaving out the question now, of inequitable rules, which I have just referred to, that they are going ahead entirely too fast by comparison with the other classes of employes, when you consider the responsibilities and duties of those employes.”

Interest of Public.

If we have correctly analyzed and stated the issues joined herein, we believe that under the issues so joined the employes have wholly failed to prove the changed conditions asserted in the opening statement to be the basis for the increases demanded. But on the broader issue of comparison with their fellow engineers and firemen, of comparison with the earnings of other railroad employes, and of comparison with other trades and crafts, we believe we have further shown that the engineers and firemen in Western territory are now the most highly paid class of employes in railroading or in any other comparable industry. If these are legitimate deductions, justified from the proof, then consideration need not be given to the question of the enormous cost to the railroads of the granting of any one of the proposals under arbitration, because it would seem that unless the employes have sustained the burden which on them rests of prov-

ing their right to an increase, the Board need never reach any consideration of the question of the amount of increase which would be carried by each of the several requests, if granted.

Yet in a proceeding of this character, to which public-service corporations are parties, the question of added cost is a matter in which the public has an interest; and railroad companies have no more right to dissipate their earnings through wasteful pay-rolls or speculative wage-schedule provisions than through any other form of improvident operation. The public, through their proper representatives, now fix and determine the rates which may be charged by railroads, and out of the revenues produced under such rates efficient service must be provided, all classes of employes compensated, and a sufficient return to capital assured to maintain railroad credit. Economy in operation is a prerequisite to securing any consideration of a request for increased rates. In the Five Per Cent case, decided July 29, 1914 (31 I. C. C. 351), the Interstate Commerce Commission said (412): “We suggest also that in other departments the management undertake, *in co-operation with employes*, an extensive inquiry into possible economies in operation.”

While railroad companies have no right to require or expect that their employes shall work under less favorable conditions, or be paid less rates than those which are fair, just and reasonable, neither have they the right to pay wages higher than what is fairly and reasonably justified by the service demanded. That such is the measure of the duty and responsibility of railways as to the payment of wages to their employes, was clearly stated in the 1910 Eastern Advance Rate case (20 I. C. C., 243, 278), where Commissioner Prouty, discussing the claims advanced by the railroads as to the cause of increased operating expenses, said, pertaining to wages:

“The same remark would seem to apply to wages as they stand after the recent increases. Railroad labor, certainly organized railroad labor, is probably as well paid, and some say better paid, than labor of other kinds, upon the average. Railroad employes will hardly expect to receive wages which exceed those paid to other forms of labor for the same grade of service, and this Commission certainly could not permit the charging of rates for the purpose of enabling railroads to pay their laborers extravagant compensation as

measured by the general average compensation paid labor in this country as a whole.

“It is likely, therefore, that the labor item of these railroads will not in the immediate future much increase, unless there should be a general advance in all prices.”

At page 305 of the opinion, it is said:

“But it should be further said that before any general advance can be permitted, it must appear with reasonable certainty that carriers have exercised proper economy in the purchase of their supplies, in the payment of their wages, and in the general conduct of their business.”

Therefore, every rule affecting railroad service which has no sound principle behind it, and which causes the diversion to any class of labor of money not really earned by what Mr. Trenholm spoke of as “an honest day’s work,” is a waste of revenue which no one can expect to be approved by the rate-making body of the country. In view of the fact so many times admitted of record by various employes, as well as having been so clearly shown by Mr. Higgins in tracing the historical development of railroad schedules, viz: that rules having an innocent appearing guise as merely remedial measures, are often distorted into revenue producers for the purpose of bringing about double or multiple payments for the same service, we have thought it proper to direct attention to the enormous amount which the companies would have to pay if any of these demands were granted—so enormous in fact that these payments could only be met either through some added tax upon the public whereby to increase the revenues, or through the postponement of return to capital to a degree which would imperil the credit of some of the railroads in the movement.

Amount of Increases Demanded:—The method adopted to ascertain the amount of added burden which these demands would impose upon the railroads, has not been shown to be, in any respect, other than fair and accurate. By applying the proposals under arbitration to the actual time slips of the men for the month in which the proposals were presented, each road was able to ascertain, with reasonable accuracy, just what would have accrued as earnings under these time slips had the proposals been in effect. These time slips, together with the payrolls, train

sheets and other working data, requested by the men on five roads of their own selection (Record 4376) were carefully gone over by representatives of the men and no witness was placed upon the stand to question the accuracy of the computations as to the change in compensation which the proposals would bring about. So, too, it is worthy of note that no witness on behalf of the employes contradicted the correctness of the interpretation placed by the railroads upon the proposals in making application of said proposals to actual operations of October, 1913.

As thus applied to operations for October, 1913, the effect of these proposals is to change the engineers' and firemen's payrolls from \$7,214,320.93 to \$10,890,282.81. Mr. Lauck testified (Record 6422-6425) that so long as there was given to this month's operation only the importance which that month's payroll bore to the payroll for the entire year, a reasonably accurate estimate of the increased expense could be made for the year. By the adoption of this method, it is shown on Railroads' Exhibit 3 that the actual payroll of engineers and firemen for the fiscal year 1914 was \$75,713,447.20 and one year's operation under these proposals would mean an added burden to the railroads of \$40,886,708.57.

From the details shown on the different sheets of said Exhibit 3, the Board can ascertain the cost to any railroad in any class of service of each and all of the sixteen proposals.

Revenue to Meet Demands.

Since the last wage increase to engineers and firemen, what has the public, through the traffic which moves under rates regulated by public authority, provided in the way of revenue with which to meet these demands? This information is given in Railroads' Exhibit 4, as follows:

Sheet No. 1 shows that the net operating income decreased from 1910 to 1914 in the sum of \$15,652,533; that it decreased in 1914 from 1913, \$39,128,875.

Sheets Nos. 2, 3 and 4 show the operating revenues, operating expenses and net operating revenue of the individual lines for the fiscal years 1914, 1913 and 1910.

Sheet No. 5 shows by individual lines an increase in taxes, 1914 from 1910 of \$18,687,059.73, and an increase in taxes 1914 from 1913 of \$8,219,227.90.

Railroads' Exhibit 5 shows there was declared out of income in 1914 \$21,995,239 less in dividends than in 1910, and that there was carried to surplus in 1914 \$24,470,475 less than in 1910.

Railroads' Exhibit 49 introduced on the last day of the hearing shows that in the first seven months of the current fiscal year, there has been a falling off of \$41,488,658 in gross revenues as compared with the corresponding period in 1914.

Yet during the three years ending June 30, 1913 (Railroads' Exhibit 6) these railroads made expenditures for additions, extensions and improvements of property which aggregate over \$600,000,000, of which sum (Railroads' Exhibit 7) over \$220,000,000 was spent for the purpose of increasing efficiency and safety and to expedite train movements.

Clearly in such a situation as these figures disclose, no justification is found for placing an added burden on these carriers. Granting that labor is entitled to and must be fully and fairly paid before any consideration is given to the claims of capital, the fixing of a wage scale has the practical effect of placing a first lien on the output of the plant—in the case of \$40,000,000 a year demands, if capitalized on Mr. Lauck's four per cent basis, equivalent to a first lien of a billion dollars.

But in the arbitration between the Eastern railroads and the Conductors and Trainmen, the arbitrators recognized that advances in the wages of railroad train employes move in cycles (Award 2); that an advance to one branch of train employes is usually followed by an advance to their fellow employes; and Mr. Higgins testified (Record 4722) that on the Missouri Pacific Iron Mountain System during the period since 1907 in which increases to engineers and firemen aggregated \$511,342, the total increase to organized labor was \$2,076,619 per year and the added increase to unorganized labor \$954,722 per annum, making a grand total increase to both organized and unorganized labor of \$3,031,341.

While Mr. Lauck, in response to questions by Mr. Nagel (Record 6361) said it might be possible "theoretically" that an award to engineers and firemen in this case might so conflict with the Eastern Awards as to place the shippers in one territory at a disadvantage with respect to the other, yet we insist that the cold statistical figures which these railroad exhibits contain take this case out of the realm of mere theory and into the realm of

practical demonstration. When it is considered, as Mr. Lauck admits (Record 6575) that in the West at the present time for each dollar of investment in railroad property there is produced in *gross revenue* out of which to pay operating expenses, taxes, return to capital, to create a surplus to take care of lean years and to establish and maintain credit with the investing public only 15.51c as against 23.49c for each dollar of railroad investment in Eastern territory; when Western railroads pay higher wages out of this 15.51c revenue than are paid out of the 23.49c in the East; and when demand is made in this proceeding for a still larger discrimination in favor of the Western engineer and fireman, we submit it is not mere theory but a very practical condition which confronts and concerns all those who are interested in the growth and development of Western territory.

CONCLUSION.

With the showing made on behalf of the railroads, not merely in meeting and overcoming the alleged change in conditions since the last wage movement, but also in showing affirmatively that Western rates are higher and compensation greater than to engineers and firemen in any other territory and that this compensation is fair, liberal and adequate measured either in terms of actual dollars paid, or by comparison with other trades or with other callings, we most respectfully submit that absolute justice will be done these employees by the increase which will come through the adoption of the principle laid down in the Eastern arbitrations, that on roads having the standard ten-hour day, when men are paid on an hourly basis their pay shall begin at the time required to report for duty and continue until released.

We direct attention to the fact that although the time slips, payrolls, train sheets and other data on the five important railroad systems, which the men selected for purposes of checking, have been subjected to the closest scrutiny by skilled statisticians, yet these payroll figures have not been contradicted, notwithstanding the fact that during the hearing and as a part of the discussion pertaining to Railroads' Exhibit 41, which shows earning of engineers, Mr. Carter said (Record 5827) :

“I have spent ten days trying to get something out of the exhibits presented by the Railroads. We will show what we have received, and if I seem insistent here, it is because *I have reached the conclusion that our case is lost, if we treat the exhibits of the railroads too seriously.*”

With the issue thus clearly defined and thus precisely and accurately stated, the problem of the Board should be of easy solution. That the railroad exhibits, compiled with such care and accuracy that they remain unchallenged after check and analysis by a corp of experts of the men's selection, will be treated seriously, we confidently expect; and with like confidence, we believe that through such treatment and through serious consideration of the facts and figures which these exhibits contain, the conclusion announced by Mr. Carter follows as a matter of irresistible logic.

All of which is respectfully submitted.

A. W. TRENHOLM, *Chairman.*

J. W. HIGGINS.

F. C. BATCHELDER.

P. H. MORRISSEY.

P. C. HART.

D. W. CAMPBELL.

GRANT HALL.

J. H. KEEFE.

W. S. MARTIN.

M. J. BUCKLEY.

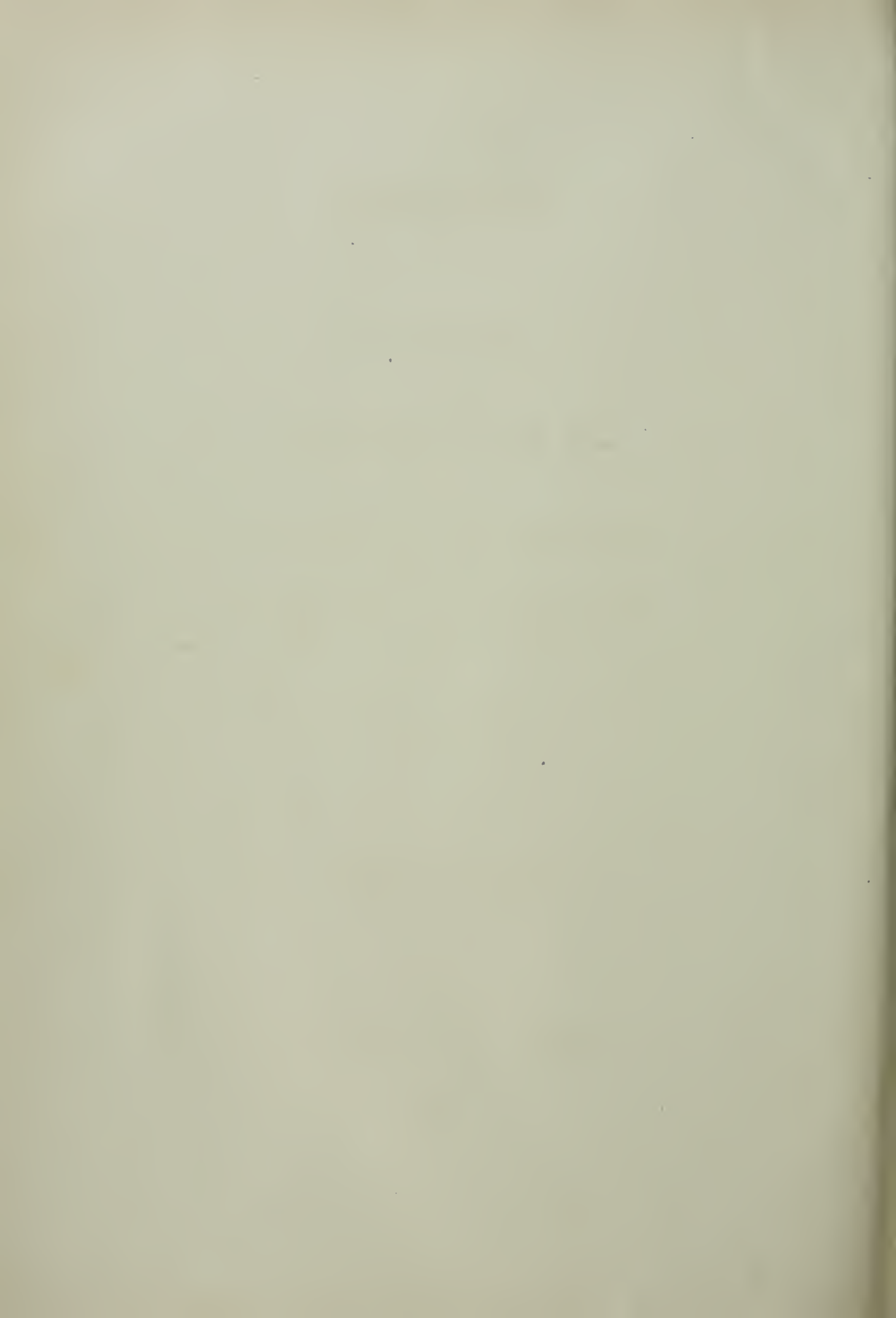
W. J. TOLLERTON.

H. M. CURRY.

Conference Committee of Managers.

JAMES M. SHEEAN,

Counsel for the Committee.



AWARD

ARBITRATION

between

THE WESTERN RAILROADS

and

**BROTHERHOOD OF LOCOMOTIVE
ENGINEERS and**

**BROTHERHOOD OF LOCOMOTIVE
FIREMEN AND ENGINEMEN**

Submitted to Arbitration, under the Act of
July 15, 1913, by Agreement dated
August 3, 1914.

**CHICAGO, ILLINOIS
APRIL 30, 1915**

*Law Reporting Company, Official Reporters,
115 Broadway, New York; 1101 Ashland Block, Chicago.*

ARBITRATION

OF THE CONTROVERSY BETWEEN THE BROTHER-
HOOD OF LOCOMOTIVE ENGINEERS AND THE
BROTHERHOOD OF LOCOMOTIVE FIRE-
MEN AND ENGINEMEN

AND THE FOLLOWING WESTERN RAILROADS:

- ATCHISON, TOPEKA & SANTA FE RY.—EASTERN LINES.
ATCHISON, TOPEKA & SANTA FE RY.—WESTERN LINES.
 Southern Kansas Ry. of Texas.
 Pecos & Northern Texas Ry.
 Pecos River R. R.
 Rio Grande & El Paso R. R.
ATCHISON, TOPEKA & SANTA FE RY.—COAST LINES.
 Grand Canyon Ry.
A. T. & S. F. RY.—SANTA FE, PRESCOTT & PHOENIX LINES.
GULF, COLORADO & SANTA FE RY.
 Texas & Gulf Railway.
 Gulf & Interstate Ry. of Texas.
 Concho, San Saba & Llano Valley R. R.
BALTIMORE & OHIO CHICAGO TERMINAL R. R.
BELT RY. OF CHICAGO (Firemen only).
CANADIAN NORTHERN RAILWAY.
 Duluth, Winnipeg & Pacific Ry.
CANADIAN PACIFIC RY.—LINES WEST OF FORT WILLIAM.
CHICAGO & ALTON RAILROAD.
CHICAGO & NORTH WESTERN RY.
 Pierre & Fort Pierre Bridge Ry.
 Pierre, Rapid City & Northwestern R. R.
 Wyoming & Northwestern Ry.
CHICAGO & WESTERN INDIANA R. R. (Firemen only).
CHICAGO, BURLINGTON & QUINCY R. R.
CHICAGO GREAT WESTERN R. R.
CHICAGO JUNCTION RY.
CHICAGO, MILWAUKEE & ST. PAUL RY.—EASTERN LINES.
CHICAGO, MILWAUKEE & ST. PAUL RY.—PUGET SOUND LINES.
 Bellingham & Northern R. R.
 Tacoma Eastern R. R.

CHICAGO, ROCK ISLAND & PACIFIC RY.
 Chicago, Rock Island & Gulf Ry.
 COLORADO & SOUTHERN RY.
 CHICAGO, ST. PAUL, MINNEAPOLIS & OMAHA RY.
 DAVENPORT, ROCK ISLAND & NORTH WESTERN RY.
 DENVER & RIO GRANDE R. R.
 DULUTH, SOUTH SHORE & ATLANTIC RY.
 Mineral Range R. R.
 EL PASO & SOUTHWESTERN RY.
 FORT WORTH BELT RY.
 FORT WORTH & DENVER CITY RY.
 Wichita Valley Ry.
 GREAT NORTHERN RY. SYSTEM.
 ILLINOIS CENTRAL R. R.
 Yazoo & Mississippi Valley Ry.
 INTERNATIONAL & GREAT NORTHERN RY.
 KANSAS CITY, CLINTON & SPRINGFIELD RY.
 KANSAS CITY SOUTHERN RY.
 Texarkana & Ft. Smith Ry.
 KANSAS CITY TERMINAL RY.
 LOUISIANA & ARKANSAS RY.
 MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE RY.
 MISSOURI & NORTH ARKANSAS R. R.
 MISSOURI, KANSAS & TEXAS RY.
 Missouri, Kansas & Texas Ry. of Texas.
 Beaumont & Great Northern R. R.
 Texas Central R. R.
 Wichita Falls Lines.
 MISSOURI, OKLAHOMA & GULF RY.
 MISSOURI PACIFIC RY. and ST. LOUIS, IRON MOUNTAIN &
 SOUTHERN RY.
 NORTHERN PACIFIC RY.
 OREGON-WASHINGTON R. R. & NAVIGATION CO.
 OREGON SHORT LINE R. R.
 ST. LOUIS & SAN FRANCISCO R. R. (Except Hostlers).
 NEW ORLEANS, TEXAS & MEXICO R. R.
 Orange & Northwestern R. R.
 Beaumont, Sour Lake & Western Ry.
 ST. LOUIS, BROWNSVILLE & MEXICO RY.

ST. LOUIS, SAN FRANCISCO & TEXAS RY.
 Fort Worth & Rio Grande Ry.
 ST. LOUIS SOUTHWESTERN RY.
 St. Louis Southwestern Ry. of Texas.
 SAN ANTONIO & ARANSAS PASS RY.
 SAN PEDRO, LOS ANGELES & SALT LAKE R. R.
 SOUTHERN PACIFIC CO.—PACIFIC SYSTEM.
 SUNSET CENTRAL LINES:
 Galveston, Harrisburg & San Antonio Ry.
 Houston & Texas Central R. R.
 Houston East & West Texas Ry.
 Houston & Shreveport R. R.
 Texas & New Orleans R. R.
 Morgan's Louisiana & Texas R. R. and Steamship Co.
 Louisiana Western R. R.
 SPOKANE, PORTLAND & SEATTLE RY.
 Oregon Trunk Ry.
 TERMINAL RAILROAD ASSOCIATION OF ST. LOUIS.
 St. Louis Merchants Bridge Terminal Ry.
 TEXAS & PACIFIC RY.
 Denison & Pacific Suburban Ry.
 Weatherford, Mineral Wells & N. W. Ry.
 TRINITY & BRAZOS VALLEY RY.
 UNION PACIFIC R. R.
 UNION RAILWAY—MEMPHIS.
 UNION STOCK YARDS OF OMAHA.
 WABASH RAILROAD—LINES WEST OF DETROIT & TOLEDO.
 WESTERN PACIFIC RY.
 THE WIGGINS FERRY CO.

On October 10, 1913, the Brotherhood of Locomotive Engineers and Brotherhood of Locomotive Firemen and Enginemen, through their duly accredited officers, in support of the demands of the Engineers, Firemen and Hostlers, presented a request on behalf of all such Employes of these Railroads for an increase in wages and for sundry improvements of the rules controlling conditions of service. Meetings were held between the Committee representing the Employes and the Conference Committee of Managers representing the Railroads, in Chicago, Illinois,

and negotiations were carried on and a strike vote was taken, and the Committee representing the Employes and the Conference Committee of Managers failing to adjust the controversy, the parties at interest invoked the provisions of the Act of July 15, 1913, by calling on the United States Board of Mediation and Conciliation to undertake to settle the controversy by mediation.

Honorable William L. Chambers, Judge Martin A. Knapp and G. W. W. Hanger, of the United States Board of Mediation and Conciliation, conferred with the parties at Chicago for several days, and, failing to settle the controversy by mediation, on August 3, 1914, the matter was submitted to arbitration by agreement.

The parties agreed that the matters in controversy should be submitted to an Arbitration Board composed of six members, two to be appointed by the Brotherhoods, two by the Railroads, and two neutral members. The Brotherhoods named as their representatives on the Board, F. A. Burgess, of Cleveland, Ohio, Assistant Grand Chief, Brotherhood of Locomotive Engineers, and Timothy Shea, of Peoria, Illinois, Assistant President, Brotherhood of Locomotive Firemen and Enginemen. The Railroads named as their representatives on the Board, H. E. Byram, of Chicago, Illinois, Vice-President, Chicago, Burlington & Quincy Railroad, and W. L. Park, of Chicago, Illinois, Vice-President, Illinois Central Railroad. The four members of the Board thus chosen, having failed to agree upon the two neutral arbitrators within fifteen days as provided in the Act of July 15, 1913, on September 8, 1914, notified the United States Board of Mediation and Conciliation that they had failed to agree upon the two neutral arbitrators. On November 21, 1914, the United States Board of Mediation and Conciliation notified the four arbitrators chosen by the parties that under provision of the Act of July 15, 1913, the Board had named as the remaining arbitrators Jeter C. Pritchard, of Asheville, North Carolina, and Charles Nagel, of St. Louis, Missouri. The date for the beginning of the hearings was set for November 30, 1914.

The Board of Arbitration, appointed as above, held its first meeting in Room 603, Federal Building, Chicago, Illinois, on Monday, November 30, 1914. Jeter C. Pritchard, of Asheville,

North Carolina, was elected Chairman of the Board; H. S. Milstead, of Washington, D. C., was appointed Secretary, and William A. Britt, of Asheville, North Carolina, was appointed Assistant Secretary.

Public hearings were held from November 30, 1914, to and including March 18, 1915. On March 29, 1915, briefs were submitted by both sides and arguments were had from March 29 to and including April 2, 1915.

Testimony was taken from November 30, 1914 (including arguments), to and including April 2, 1915, printed pages 1 to 7828, inclusive. Exhibits were presented by the Employes, numbers 1 to 89, and exhibits presented by the Railroads, 1 to 50, inclusive.

The original agreement to arbitrate, dated August 3, 1914, provided for making and filing the award within ninety days from the date of the first hearing. It being impossible for the Board to conclude its labors within the time specified in the original agreement, on February 16, 1915, a supplemental agreement was entered into extending the time in which the Board might reach its decision and file its award to and including the 20th day of April, 1915. The Board subsequently finding that it could not reach a conclusion and file its award by the 20th day of April, a second supplemental agreement was entered into extending the time in which the Board might reach its decision and file its award to and including the 30th day of April, 1915. The Board was in executive session from April 3, 1915, to and including April 30, 1915, the date of the making and filing of this award.

After due deliberation and consideration of all the evidence, exhibits, arguments and briefs, the Board has reached a conclusion in respect of the demands of the Employes for increased rates of pay and for improved conditions of service, and make the award as follows upon all the matters contained in the Articles of Submission:

AWARDED.

PROPOSED BY EMPLOYES: ARTICLE I.

BASIS OF A DAY'S WORK.

Passenger Service.

One hundred miles or less, five hours or less, will constitute a day's work in all classes of passenger service. All mileage in excess of 100 miles shall be paid for pro rata.

All Other Service Except Switching.

One hundred miles or less, 10 hours or less, will constitute a day's work in all classes of service except passenger and switching service. All mileage in excess of 100 miles shall be paid for pro rata. Ten miles' run will be the equivalent of one hour's service performed, or vice versa.

OVERTIME IN ROAD SERVICE.

Passenger Service.

Overtime in passenger service will be computed and paid for on a basis of twenty miles per hour, at rate for each class of engine used.

All Other Road Service.

Overtime in all other service except passenger and switching service will be computed on a basis of ten miles per hour, and paid for at the rate of 15 miles per hour, at rate for each class of engine used.

All overtime will be computed on the minute basis.

IT IS AWARDED: ARTICLE I.

BASIS OF DAY AND OVERTIME.

Passenger Service.

The minimum passenger rate for engineers shall be \$4.30, and for firemen \$2.50, one hundred (100) miles, or less, six (6) hours and forty (40) minutes, or less, shall constitute a minimum day's work in all classes of passenger service except as otherwise

specified herein; miles made in excess of one hundred (100) pro rata.

On short turn around runs no single trip of which exceeds eighty (80) miles, including suburban service, overtime shall be paid for all time actually on duty or held for duty in excess of eight (8) hours (computed on each run from the time required to report for duty to end of that run) within twelve (12) consecutive hours; and also for all time in excess of twelve (12) consecutive hours computed continuously from the time first required to report to final release at end of last run. Time shall be counted as continuous service in all cases where the interval of release from duty at any point does not exceed one hour.

All other passenger overtime shall be computed on the basis of fifteen (15) miles per hour from the time required to report for duty until released, and separately for each part of a round trip run.

All passenger overtime will be paid for at the rate of seventy-five (75) cents per hour for engineers and forty-five (45) cents for firemen, and will be computed on the minute basis.

When employes of any road elect to retain their present overtime basis, no part of this Article is to be used in computing or paying passenger overtime.

Freight Service.

The minimum freight rate for engineers and firemen shall be according to class of locomotive, as provided in Article II, for ten (10) hours, or less, or one hundred (100) miles, or less; miles made in excess of one hundred (100) pro rata.

Overtime in freight service is to be computed on the basis of ten (10) miles per hour, and paid pro rata on the minute basis.

General.

Road engineers and firemen required to perform a combination of more than one class of road service during the same trip will be paid at the rate and according to the rules governing each class of service for the time or miles engaged in each, but will be paid for the entire trip not less than a minimum day at the highest rate applying for any class of service performed during such trip.

Where two or more engines of different weights on drivers are used during a trip or day's work, the highest rate applicable to any engine used should be paid for the entire day or trip.

PROPOSED BY EMPLOYES: ARTICLE II. RATES OF PAY.

Passenger Service.

The rate in passenger service on locomotives other than the Mallet type weighing less than:

	Engineers	Firemen
80,000 lbs. on drivers shall be.....	\$4.50	\$2.90
80,000 lbs. and less than 100,000 lbs. on drivers.....	4.60	3.00
100,000 lbs. and less than 140,000 lbs. on drivers.....	4.80	3.15
140,000 lbs. and less than 170,000 lbs. on drivers.....	5.00	3.25
170,000 lbs. and less than 200,000 lbs. on drivers.....	5.15	3.40
200,000 lbs. and less than 225,000 lbs. on drivers.....	5.35	3.50
225,000 lbs. and less than 250,000 lbs. on drivers.....	5.50	3.65
250,000 lbs. and over on drivers.....	5.60	3.75

In all classes of service except passenger and switching service on locomotives other than Mallet type weighing less than:

	Engineers	Firemen
80,000 lbs. on drivers shall be.....	\$5.00	\$3.25
80,000 lbs. and less than 100,000 lbs. on drivers.....	5.20	3.40
100,000 lbs. and less than 140,000 lbs. on drivers.....	5.40	3.50
140,000 lbs. and less than 170,000 lbs. on drivers.....	5.60	3.65
170,000 lbs. and less than 200,000 lbs. on drivers.....	5.80	3.75
200,000 lbs. and less than 225,000 lbs. on drivers.....	6.10	4.00
225,000 lbs. and less than 250,000 lbs. on drivers.....	6.40	4.25
250,000 lbs. and over on drivers.....	6.70	4.50

Mallet type engines, all classes of service, except switching service, weighing less than:

	Engineers	Firemen
250,000 lbs. on drivers.....	\$7.50	\$4.90
250,000 lbs. and less than 300,000 lbs. on drivers.....	7.75	5.10
300,000 lbs. and less than 400,000 lbs. on drivers.....	8.00	5.25
400,000 lbs. and over on drivers.....	8.25	5.50

Pusher, Helper, Mine Runs, Work, Wreck, Belt Lines, Transfer, and All Other Unclassified Service.

Engineers and Firemen on Locomotives in pusher and helper service, mine runs, work, wreck, belt line and transfer service, and all other unclassified service, will be paid through freight rate according to the class of engine.

Divisions where grade is 1.8%.

On all divisions where grade is one and eight-tenths per cent or over, an increase of ten per cent over Valley rates will be paid.

Narrow-Gauge Locomotives.

On roads where narrow-gauge locomotives are in service, a five per cent increase over present rates in effect shall be granted.

Electric Locomotives, Electric either Multiple Unit or Single, Gasoline or other Service.

Wherever electric, multiple unit, gasoline or other service is installed as a substitute for steam, or is now in operation on any railroad parties to this agreement or on any of the tracks operated or controlled by any of them as part of their system, the Locomotive Engineers and Firemen shall have the right to the position of Motorman and Helper, respectively. The term "helper" will be understood to mean the second man employed on electric locomotives or other power.

Seniority Rights, Rules, Hours of Service and Mileage.

Seniority rights to be interchangeable. Steam rules, hours of service and mileage to apply with the following rates of pay:

Passenger Service.

	Motorman	Helper
20,000 lbs. tractive power and less.....	\$4.50	\$3.35
Over 20,000 lbs. tractive power and less than 25,000 lbs.....	4.60	3.35
Over 25,000 lbs. tractive power and less than 30,000 lbs.....	4.70	3.35
Over 30,000 lbs. tractive power and less than 35,000 lbs.....	4.80	3.35
Over 35,000 lbs. tractive power and less than 40,000 lbs.....	4.90	3.35
Over 40,000 lbs. tractive power and less than 45,000 lbs.....	5.00	3.35
Over 45,000 lbs. tractive power and less than 50,000 lbs.....	5.15	3.35
Over 50,000 lbs. tractive power and less than 55,000 lbs.....	5.35	3.35
Over 55,000 lbs. tractive power and less than 60,000 lbs.....	5.50	3.35
Over 60,000 lbs. tractive power and over.....	5.60	3.35

All other Service except Passenger and Switching.

	Motorman	Helper
20,000 lbs. tractive power and less.....	\$5.00	\$3.75
Over 20,000 lbs. tractive power and less than 25,000 lbs.....	5.20	3.75
Over 25,000 lbs. tractive power and less than 30,000 lbs.....	5.30	3.75
Over 30,000 lbs. tractive power and less than 35,000 lbs.....	5.40	3.75
Over 35,000 lbs. tractive power and less than 40,000 lbs.....	5.60	3.75
Over 40,000 lbs. tractive power and less than 45,000 lbs.....	5.80	3.75

	Motorman	Helper
Over 45,000 lbs. tractive power and less than 50,000 lbs.....	\$6.00	\$3.75
Over 50,000 lbs. tractive power and less than 55,000 lbs.....	6.20	3.75
Over 55,000 lbs. tractive power and less than 60,000 lbs.....	6.40	3.75
Over 60,000 lbs. tractive power and less than 65,000 lbs.....	6.60	3.75
Over 65,000 lbs. tractive power and less than 70,000 lbs.....	6.80	3.75
Over 70,000 lbs. tractive power and over.....	7.00	3.75

Switching Service.

	Motorman	Helper
20,000 lbs. tractive power and less.....	\$4.75	\$3.10
Over 20,000 lbs. tractive power and less than 40,000 lbs.....	5.00	3.10
Over 40,000 lbs. tractive power and less than 60,000 lbs.....	5.50	3.10
Over 60,000 lbs. tractive power.....	6.00	3.10

IT IS AWARDED: ARTICLE II. RATES OF PAY.

Passenger Service.

The minimum rates of wages per day shall be:

	Engineers	—Firemen—	
		Coal	Oil
Engines less than 80,000 on drivers.....	\$4.30	\$2.50	\$2.50
Engines 80,000 lbs. and less than 100,000 lbs. on drivers.....	4.30	2.55	2.50
Engines 100,000 lbs. and less than 140,000 lbs. on drivers.....	4.40	2.60	2.50
Engines 140,000 lbs. and less than 170,000 lbs. on drivers.....	4.40	2.70	2.55
Engines 170,000 lbs. and less than 200,000 lbs. on drivers.....	4.45	2.85	2.70
Engines 200,000 lbs. and less than 250,000 lbs. on drivers.....	4.45	3.00	2.85
Engines 250,000 lbs. and less than 300,000 lbs. on drivers.....	4.65	3.20	3.05
Engines 300,000 lbs. and less than 350,000 lbs. on drivers.....	4.80	3.40	3.25
Engines 350,000 lbs. and over on drivers.....	4.80	3.60	3.45
Mallet engines regardless of weights on drivers.....	5.00	4.00	3.85

Freight Service.

The minimum rates of wages per day shall be:

	Engineers	—Firemen—	
		Coal	Oil
Engines less than 80,000 lbs. on drivers.....	\$4.75	\$2.75	\$2.75
Engines 80,000 lbs. and less than 100,000 lbs. on drivers.....	4.80	2.85	2.75
Engines 100,000 lbs. and less than 140,000 lbs. on drivers.....	4.85	3.00	2.85
Engines 140,000 lbs. and less than 170,000 lbs. on drivers.....	5.10	3.20	3.05
Engines 170,000 lbs. and less than 200,000 lbs. on drivers.....	5.30	3.45	3.30
Engines 200,000 lbs. and less than 250,000 lbs. on drivers.....	5.45	3.70	*3.55
Engines 250,000 lbs. and less than 300,000 lbs. on drivers.....	5.60	3.80	3.80
Engines 300,000 lbs. and over on drivers.....	5.75	4.00	4.00
Mallet engines less than 275,000 lbs. on drivers.....	6.00	4.00	4.00
Mallet engines 275,000 lbs. and over on drivers.....	6.50	4.25	4.25

* Oil differential not to apply on engines weighing over 215,000 lbs. on drivers.

Existing rates of pay per day that are higher than the above minima are hereby awarded.

Work, Wreck, Pusher or Helper, Mine Runs, Circus Trains, and Trains Established for the Exclusive Purpose of Handling Milk.

Through freight rates will apply on all work, wreck, pusher or helper, mine runs, circus trains, and to trains established for the exclusive purpose of handling milk; all according to class of engines; overtime to be computed on minute basis. Through freight rules in this award as to mileage and overtime to apply.

Belt Line or Transfer Service.

The Board recognized that in Belt Line or Transfer Service the grade of work is clearly different from ordinary switching service, and may, therefore, properly be entitled to higher rate of pay; but the information before the Board shows that conditions over the Western territory vary so widely in this service that they are unable to reach an agreement regarding a fair rate for such service. The Board, therefore, refers the question of Belt Line or Transfer Service back to the engineers and firemen and the management of the different roads for local settlements, which shall take into consideration the difference between Belt Line or Transfer Service and Switching Service, in fixing the rates of pay.

Grades of 1.8% and Over.

The territory in which there exists a differential in rates of pay by reason of gradients has been long established, and we make no change in respect thereto.

On railroads where a differential in the rates of pay for Engineers and Firemen are allowed under schedules in effect October 10, 1913, on account of grades or mountain service, either by excess rates or constructive mileage, such differential shall be maintained in addition to the rates granted by this Award.

Narrow-Gauge Locomotives.

This request is declined.

Electric Locomotives, Electric Either Multiple Unit or Single. Gasoline or Other Service.

Wherever electric service is installed as a substitute for steam, or is now in operation on any of the railroad parties to this arbitration, or on any of the tracks operated or controlled by any of them as part of their system, the locomotive engineers and firemen shall have the preference for the positions of engineers, or motormen, or helpers on electric locomotives or multiple unit trains; but this right of the engineers and firemen shall not operate to displace any man operating electric power on any of the railroads parties to this arbitration, on May 1, 1915.

Since the use of electric locomotives or multiple unit trains upon steam railways is in so early a stage of development, and there is as yet no approximation to stable conditions, but a wide variation in existing practices, the Board find themselves unable, from the evidence before them, to make any uniform rules regulating rates of pay and conditions of service for engineers, or motormen, or helpers employed on such trains. The minimum day's wage of \$4.30 for engineers or motormen, and \$2.50 for helpers in Passenger Service, and \$4.75 for engineers or motormen, and \$2.75 for helpers in Freight Service is, however, awarded; but the day's work covered by the same, both as regards hours of service and mileage covered, is that which now exists in electric service on the various roads, not that covered under the preceding headings pertaining to "Freight and Passenger Service."

This award is without prejudice to existing contracts for such service.

PROPOSED BY EMPLOYES: ARTICLE III.

LOCAL OR WAY FREIGHT SERVICE.

Local trains are way freight or mixed trains whose work is the loading or unloading of freight or doing station switching en route.

Engineers and Firemen on such trains will be paid ten per cent increase over through freight rates.

Additional pay.

Through or irregular freight trains doing work such as loading or unloading freight, stock or company material, switching at stations, spurs, mines, mills, or required to pick up or set out cars, unless cars to be picked up are first out, or cars to be set out are switched together at terminals, or doing any other similar work, shall be paid for same at overtime rates in addition to time or mileage made on the trip.

IT IS AWARDED: ARTICLE III.**LOCAL OR WAY FREIGHT.**

A minimum of thirty (30) cents per hundred miles, or less, is to be added for local freight service to through freight rates for engineers and firemen, according to class of engine. Miles over one hundred to be paid for pro rata.

PROPOSED BY EMPLOYES: ARTICLE IV.**SWITCHING SERVICE.**

Rates of pay.	Engineers	Firemen
Engines weighing less than 140,000 lbs. on drivers.....	\$4.75	\$3.10
Engines weighing 140,000 lbs. and over on drivers.....	5.00	3.25
Mallet type engines.....	6.00	4.00

Engineers and Firemen required to begin service other than between the hours of 6 a. m. and 8 a. m. will be paid 2 cents per hour, in addition to above rate.

Day's work.

Ten hours or less will constitute a day's work in switching service. Time to be computed continuously, all over ten hours to be computed and paid for at the rate of time and one-half. All overtime to be computed on minute basis.

Meals.

Switch Engineers and Firemen will not be required to work longer than six consecutive hours without being allowed thirty minutes undisturbed for meals.

Road Engines used.

When Road Engines are used in yard service, road rates will apply.

IT IS AWARDED: ARTICLE IV. SWITCHING SERVICE.

Rates of Pay.

The minimum rate of wages per day of ten (10) hours or less; overtime pro rata on minute basis, shall be:

	Engineers	Firemen
Engines less than 140,000 lbs. on drivers.....	\$4.25	\$2.70
Engines 140,000 lbs. and over on drivers.....	4.40	2.75

MALLET ENGINES.

Engines 275,000 lbs. or less on drivers.....	5.15	4.00
Engines over 275,000 lbs. on drivers.....	5.40	4.00

Beginning and Ending of Day.

Time to begin when required to report for duty and to end at time engine is placed on designated track or engineer or fireman is released, exclusive of time off for meals.

Meals.

Engineers and firemen in switching service shall be allowed one hour for meals between the hours of 11:30 a. m. and 1:00 p. m., and between the hours of 11:30 p. m. and 1:00 a. m., but if required to work the meal hour or any part thereof, they will be paid for the hour in addition to the minimum day, and be allowed thirty (30) minutes under pay for meals.

The time for meals will commence at the time engineer and fireman are released from care of engine.

Engineers and firemen will not be required to work longer than six (6) hours without being allowed thirty (30) minutes for meals.

Existing rates of pay per day that are higher than the above minima are hereby awarded.

PROPOSED BY EMPLOYEES: ARTICLE V.
PREPARATORY TIME.

Engineers and Firemen in all classes of service will be allowed thirty minutes as preparatory time in addition to all other time or mileage made on the trip or day, at the pro rata rate corresponding with class of locomotive and service; provided, that on lines of railroad where rules or schedules require them to be on duty more than thirty minutes before time ordered to leave roundhouse or other point, they will be allowed one hour's time, and when required to be on duty more than one hour, actual time will be allowed. Preparatory time will be the time Engineers and Firemen are required to be on their locomotives, prior to time ordered to leave roundhouse or other point.

IT IS AWARDED: ARTICLE V.
BEGINNING AND ENDING OF A DAY.

In all classes of road service, an engineer's or fireman's time will commence at the time he is required to report for duty, and will conclude at the time the engine is placed on the designated track or relieved by hostler at terminal.

PROPOSED BY EMPLOYEES: ARTICLE VI.
TERMINAL DELAY.

Passenger Service.

Initial terminal delay for Engineers and Firemen in passenger service shall begin at the time they are called to leave roundhouse or other point and shall end upon departure of trains from passenger depot.

Final terminal delay for Engineers and Firemen in passenger service shall begin at the time they arrive at passenger depot, and will end when relieved from duty.

Freight Service.

Initial terminal delay in freight service shall begin at the time Engineer and Fireman is called to leave roundhouse or other point and shall end when train has passed from yard track or lead to main line, and actually departs from the terminal.

Final terminal delay in freight service shall begin when train arrives at switch leading from main line into yard, and shall end when Engineer and Fireman are relieved from duty; provided, that if from any cause trains are held out of yard, final terminal delay shall begin.

Minute Basis.

Engineers and Firemen shall be paid on a minute basis for all terminal delay; at the pro rata rate for the class of engine used; this in addition to all time or mileage made on the trip.

IT IS AWARDED: ARTICLE VI.**TERMINAL DELAY.****Initial Terminal Delay.**

Compensation for Initial Terminal Delay is not allowed beyond that involved in the rule, that pay shall begin in all cases at the time an engineer or fireman is required to report for duty.

Final Terminal Delay.

For freight service, Final Terminal Delay shall be computed from the time the engine reaches designated main track switch connection with the yard track.

For passenger service, Final Terminal Delay shall be computed from time train reaches terminal station.

Final Terminal Delay, after the lapse of thirty minutes, will be paid for the full delay at the end of the trip, at the overtime rate, according to class of engine, on the minute basis.

If road overtime has commenced, terminal overtime shall not apply, and road overtime will be paid to point of final relief.

PROPOSED BY EMPLOYEES: ARTICLE VII.

AUTOMATIC RELEASE AND TIE-UP.

Engineers and Firemen arriving at terminal or end of run are automatically released; when used again, they begin a new day.

Continuous Time.

Engineers and Firemen tied up between their terminals will be paid continuous time, no deductions will be made for time tied up.

IT IS AWARDED: ARTICLE VII.

AUTOMATIC RELEASE AND TIE-UP.

The request contained in the first paragraph of this article is denied.

Continuous Time.

Engineers and Firemen in train service tied up under the law will be paid continuous time from initial point to tie-up point. When they resume duty on continuous trip, they will be paid from tie-up point to terminal on the following basis: For fifty (50) miles or less, or five (5) hours or less, fifty (50) miles pay; for more than fifty (50) miles and up to one hundred (100) miles or over five (5) hours and up to ten (10) hours, one hundred (100) miles pay; over one hundred (100) miles, or over ten (10) hours, at schedule rates. It is understood that this does not permit running engines through terminals or around other crews at terminals unless such practice is permitted under the pay schedule.

PROPOSED BY EMPLOYEES: ARTICLE VIII.

HELD AWAY FROM HOME TERMINALS.

Engineers and Firemen held at other than home terminal (including rest period) will be paid continuous time for all time so held, after the expiration of 15 hours from time relieved

from previous duty, at the rate per hour paid for the last service performed; less than one hour not to be paid for.

IT IS AWARDED: ARTICLE VIII.

HELD AWAY FROM HOME TERMINALS.

Engineers or Firemen in pool freight and in unassigned service held at other than home terminal, will be paid continuous time for all time so held after the expiration of twenty-two (22) hours from time relieved from previous duty, at the rate per hour paid him for the last service performed. If held fourteen (14) hours after the expiration of the first thirty-two (32) hour period, he will be paid continuous time for the next succeeding ten (10) hours, or until the end of the twenty-four (24) hour period, and similarly for each twenty-four (24) hour period thereafter. Should an engineer or fireman be called for duty after pay begins, his time will be computed continuously.

PROPOSED BY EMPLOYEES: ARTICLE IX.

DEADHEADING.

Engineers and Firemen, deadheading on Company business shall be paid the same rate and on the same basis as the Engineer and Fireman on the train on which deadheading. Rules in individual schedules governing minimum day, and other conditions to apply.

IT IS AWARDED: ARTICLE IX.

DEADHEADING.

Deadheading on Company's business on passenger trains will be paid for the actual mileage at 4.3 cents per mile for Engineers, and 2.5 cents per mile for Firemen, and for deadheading on other trains at 4.75 cents per mile for Engineers and 2.75 cents per mile for Firemen; provided, that a minimum day at the above rates will be paid for the deadhead trip if no other service is performed within twenty-four (24) hours from time called to deadhead. Deadheading resulting from the exercise of seniority rights will not be paid for.

PROPOSED BY EMPLOYES: ARTICLE X.

HOSTLERS.

At points where an average of six or more locomotives are handled within twelve hours, day or night, hostlers shall be maintained.

Positions, how filled.

Hostling positions shall be filled from the ranks of the Firemen, and they shall be paid \$3.35 per day of ten hours or less; provided, that where Hostlers are required to make main-line movements, they shall be paid \$4.75 per day of ten hours or less, overtime in each case to be computed on the minute basis and paid for at the rate of time and one-half.

When such main-line or road Hostlers are paid the same rate as Engineers in switching service, such positions shall be filled from the ranks of the Engineers.

Meal Hour.

Hostlers shall be allowed one hour for meals between the hours of 11:30 and 1:30, day or night. Hostlers will be assigned regular meal hour between the hours named or after being on duty five hours. Should Hostlers be required to remain on duty after designated meal hour, one hour will be allowed as overtime. No Hostler will be required to remain on duty longer than six hours without having one full hour for meals.

IT IS AWARDED: ARTICLE X.

HOSTLERS.

The minimum pay for Hostlers will be \$4.20 per day of 12 hours, or less, overtime pro rata. Only roundhouse employees who, in handling engines, are required to have a knowledge of main line train movements will come under this designation.

Engineers and Firemen will have preference for positions as Hostlers. This will not operate to disqualify those who now hold such positions, nor to prevent same being filled from other classes of employees who may be eligible thereto, who can qualify.

All other roundhouse employees handling engines during

twenty-five (25) per cent, or more, of their daily assignment will receive \$3.00 for 12 hours, or less, overtime pro rata.

On roads where the right to legislate for Hostlers has been conceded by the Company to the Engineers or Firemen, such right as specified in individual schedules shall not be affected by the adoption of this Article.

PROPOSED BY EMPLOYES: ARTICLE XI.

SURPRISE TESTS.

That the practice of conducting surprise tests by turning switch lights and placing red lights, or flags, unaccompanied by torpedoes, beside track, or wiring down automatic signals to proceed position, be eliminated.

IT IS AWARDED: ARTICLE XI.

EFFICIENCY TESTS.

We recognize the necessity of making efficiency tests, but when such tests are made they should not be conducted under conditions that are hazardous to the employees.

PROPOSED BY EMPLOYES: ARTICLE XII.

ASSISTANCE FOR FIREMEN.

On all locomotives in freight service where but one Fireman is employed, and on all locomotives in passenger service, coal will be kept where it can be reached by the Firemen from the deck of the locomotive. Coal of the proper size for firing purposes will be placed on all tenders.

IT IS AWARDED: ARTICLE XII.

ASSISTANCE FOR FIREMEN.

On coal-burning locomotives, either passenger or freight, coal will be shoveled forward at specified points, whenever necessary, or by men riding on locomotives for that purpose, so that it can be reached by firemen from deck of the locomotive.

Coal of proper size for firing purposes will be placed on all tenders.

It is understood that the Committees on individual roads will take up with their respective officers the question of shoveling coal forward on tenders and determine the points where men shall be located to do this work.

PROPOSED BY EMPLOYES: ARTICLE XIII.

TWO FIREMEN.

On coal-burning locomotives weighing 185,000 pounds or more on drivers, when used in freight service, two Firemen will be employed.

IT IS AWARDED: ARTICLE XIII.

TWO FIREMEN.

When a second fireman is deemed necessary on coal-burning locomotives in freight service weighing more than 200,000 pounds on drivers, the matter will be taken up with proper officials of individual railroads by the Committee. Failing to reach a settlement, the matter shall be referred to an adjustment Commission to be composed of five (5) persons, two (2) of whom are to be chosen by the Railroad Company, two (2) by the Committee, and one (1) to be selected by the four (4) thus chosen, who shall be the Chairman of the Commission. Should the four (4) men fail to agree on the fifth, then three (3) days after the last of the four have been selected, the fifth man shall be named by the United States Board of Mediation and Conciliation. If, for any reason, the selection of the fifth man cannot be made by the United States Board of Mediation and Conciliation, he shall be named by the United States District Judge of the District in which the controversy may have arisen. All expenses incurred in connection with the settlement of such matters shall be borne equally by the two (2) parties to the controversy.

When two firemen are employed on a locomotive as a result of the application of the preceding paragraph, they shall each

be paid the rate for the class of engine next below, per Article II of this Award.

PROPOSED BY EMPLOYES: ARTICLE XIV.

MISCELLANEOUS.

Cleaning of Locomotives.

On railroads where Firemen are required to clean locomotives, they shall be relieved of such service.

Setting up Wedges, Filling Grease Cups and Cleaning Headlights.

Where Engineers and Firemen are required to set up wedges, fill grease cups, or clean headlights, they shall be relieved of such service at all points where roundhouse, or shop force, or an engine watchman is employed.

Placing of Supplies on Locomotives.

Where Engineers and Firemen are required to place on or remove tools or supplies from locomotives, fill lubricators, flange oilers, headlights, markers or other lamps, they shall be relieved of such service at all points where roundhouse, shop force, or an engine watchman is employed.

IT IS AWARDED: ARTICLE XIV.

MISCELLANEOUS.

Cleaning of Locomotives.

On railroads where firemen are required to clean locomotives, they shall be relieved of such cleaning.

Setting Up Wedges, Filling Grease Cups, Cleaning Headlights, also Placing Supplies on Locomotives.

Where Engineers and Firemen are required to set up wedges, fill grease cups, or clean headlights, they shall be relieved of such service at all points where competent roundhouse force is employed.

Neither will they be required to place on, or remove tools or supplies from locomotives, fill lubricators, flange oilers, headlights, markers or other lamps at points where roundhouse force, or an engine watchman, is employed.

PROPOSED BY EMPLOYES: ARTICLE XV.

OFFICIAL RECORD OF WEIGHTS ON DRIVERS.

For the purpose of recording weights on drivers, each railroad, parties to this agreement, will permanently post bulletins at all terminals showing accurate service-weights of all locomotives.

IT IS AWARDED: ARTICLE XV.

OFFICIAL RECORD OF WEIGHTS ON DRIVERS.

For the purpose of officially classifying locomotives, each railroad, party to this arbitration, will keep bulletin at all terminals showing actual weight on drivers of all engines in its service.

PROPOSED BY EMPLOYES: ARTICLE XVI.

THROWING SWITCHES AND FLAGGING.

Engineers and Firemen will not be required to throw switches, flag through blocks, or fill water cars.

IT IS AWARDED: ARTICLE XVI.

THROWING SWITCHES AND FLAGGING.

The complexity of the service and the variety of the rules are such that this Board does not deem it wise to undertake to formulate a general rule upon this subject at this time.

GENERAL REGULATIONS.

In awarding the above rates, rules and conditions it is understood that the engineers or firemen on any railroad may elect to take any daily rate, rule, or condition as herein awarded, but the Board denies right of the men to take a part or whole of any rule herein awarded and couple it with a part or whole of any rule in the present schedule and thereby create a new condition not contemplated by the award.

Nothing herein is to be construed to deprive the engineers or firemen on any railroad from retaining their present rules

and accepting any daily rate that may be awarded, or retain their present daily rate, and accept any awarded rule. It is further understood that the foregoing does not in any manner conflict with or nullify any part of Article 12 of the Arbitration Agreement, which reads as follows:

“That any rates of pay, including excess mileage or arbitrary differentials, that are higher, or any rules or conditions of employment contained in individual schedules in effect October 10, 1913, that are more favorable to the employes than the award of said Board, shall not be modified or affected by said award.”

(Signed) J. C. PRITCHARD, Chairman,

(Signed) CHARLES NAGEL,

(Signed) W. L. PARK,

(Signed) H. E. BYRAM,

Arbitrators.

Attest:

H. S. MILSTEAD,

Secretary.

MEMORANDUM FILED BY THE CHAIRMAN.

I deem it proper to say that in my opinion the freight rates, as well as the yard rates for firemen and engineers, agreed upon by the Board, are not as high as they should be. Nevertheless, the rules as respects weight on drivers, time constituting a day's work, initial and terminal delay and overtime, passenger rates and rules, and other rules, accord to the men substantial benefits which should not be denied them. Therefore, in order that the provisions of the Award may be put into effect and the men permitted to enjoy the benefit accruing therefrom, I conceive it to be my duty to join other members of the Board in making this Award.

I am satisfied that as respects many of the propositions submitted to us we have approached as near as may be at this time a standardization of many important rules and rates which will, in the future, tend to remove many things that have been the cause of innumerable controversies between the railroads and their employes.

(Signed) J. C. PRITCHARD, Chairman.

STATEMENT BY ARBITRATORS PARK AND BYRAM.

That our signatures to the award may not imply approval of it, in principle or in detail, a brief word of explanation seems necessary.

Any scheme of standardization or approach to it which does not permit of equalization of dissimilar rates and rules, in our opinion, is unsound. The agreement under which the arbitration was held gave no latitude to the Board to adjust or reconcile unequal conditions. It was one-sided. It permitted standardization only if upward.

To such provisions of the award as confer benefits upon men whose present rates and conditions merit adjustment we are in hearty accord; to those who, in our judgment, the testimony showed to have been liberally paid and properly treated, we feel that nothing additional is due them, and, in agreeing to changes in their rates and rules and to other conditions of the award, it was only because it was made apparent that these changes were necessary if we were to have an award at all. It appeared to us that for the maintenance of the principle of arbitration for the adjustment of labor disputes, which is the public interest, our duty lay in this direction, even though additional burdens of expense and regulation follow.

(Signed) W. L. PARK.

(Signed) H. E. BYRAM.

MINORITY REPORT OF F. A. BURGESS AND
TIMOTHY SHEA, REPRESENTING THE
BROTHERHOOD OF LOCOMOTIVE EN-
GINEERS AND BROTHERHOOD OF
LOCOMOTIVE FIREMEN AND
ENGINEMEN.

In expressing our dissenting opinion from the award of the Board, we are keenly alive to the fact that a unanimous finding by this Board would have resulted in almost incalculable benefit to the railroads, and employes as well, and, while we would naturally be expected to have at heart the interests of the employes, and to that extent might be termed partisan, yet this was equally true of those gentlemen who were selected by the railroads, in so far as corporate interests are concerned. Notwithstanding this fact, we approached this important and difficult duty with a hope and belief that a unanimous award could be obtained if our actions were guided by a sense of fairness founded on the changed conditions in train operation since 1910, together with the increased high cost of living.

We assumed that the advocates of the railroads would not deny, or the Board fail to recognize, these very essential facts in reaching their conclusions. Indeed, we understand the railroads, in seeking higher passenger and freight rates, predicated their demands to a very great extent, on the increased cost of all supplies they find necessary to purchase, and yet they are unwilling to recognize the same condition in fixing the compensation of employes who are paid on the basis of miles run, and who cannot and do not receive one dollar unless the companies are required to run trains; therefore, it can be clearly seen that the employes in this particular class of service carry all risks incident to the fluctuation of business, because their wages are automatically reduced during times of business depression.

The importance of this arbitration can hardly be overestimated. Both the railroads and employes have made large expenditures of time and money in preparing and presenting to the Board the merits of their questions from different viewpoints.

For substantially four months the Board has heard evi-

dence, and now, in handing down its decision, it has not, in any manner, settled the questions submitted to it for arbitration. The very best that can be said of such an award is that it settles nothing, but simply postpones any further action on the questions involved for a period of twelve months.

In making this statement we are not unmindful of the fact that in no arbitration can either side expect exact justice, or a faultless award, but we take the position that it is manifestly unfair, unreasonable, and unwarranted to employ an award rendered in the Eastern country as the controlling factor in the present arbitration. Especially is this true when the Eastern Board frankly admitted, in its award, that it felt obliged to turn to the only source of information available, viz.: the figures of the Interstate Commerce Commission, even though it recognized they were both unsatisfactory, and unreliable, as they show neither the maximum or minimum earnings, but simply purported to find the daily wage of a certain class of service by dividing the total compensation paid by the number of days worked. But, in spite of these facts, the Board continued to employ these statistics as a basis for an award that was so unfair that it caused great dissatisfaction and in many instances worked a hardship upon the employes interested.

The present Board of Arbitration, in our opinion, has substantially disregarded testimony of witnesses for employes relative to the long hours and heavy tonnage trains, and in fact, all the prevailing conditions in the Western country, giving little or no consideration to the exhibits which, in a graphic way, clearly set forth the increased productive efficiency of engineers and firemen, disregarding the evidence contained in numerous reports by railway officials as to the work of firemen on large engines having almost reached the limit of human endurance, evidently preferring to base their conclusions upon the unsound principle that governed the Eastern Arbitrators, so minutely described by Mr. Morrissey in his dissenting opinion and frankly acknowledged by the full Board as unreliable, although used as a basis in handing down its award.

The testimony presented by the employes showed conclusively that by the installation of larger engines, and the development of larger freight train loads, the Western railroads

had, during recent years, without any corresponding advance in rates of pay, added greatly to the physical work, the nervous exactions, and the already grave responsibilities of locomotive engineers and firemen. This development of operating efficiency was also accompanied, as it was pointed out, in a decreased cost of outlay for wages, per unit of traffic handled, to the railroads for engineers and firemen. These employees, it was shown, hauled more units of traffic as tons or passengers for each dollar received by them in compensation. The revenue gains or profits, arising from these methods of operation, were sufficient to pay all increases in operating expenses, reasonable and fair returns on additional capital investment in the properties and equipment of Western railroads, and to leave an immense surplus, during recent years, for the additional remuneration of engineers and firemen and other railroad employees. During the past five years it was shown that a surplus of more than \$50,000,000 had been thus developed, and engineers and firemen, by their witnesses, demonstrated that they should have a reasonable and fair share in these revenue gains in accordance with their increased labors and responsibilities.

An impartial examination of the financial condition of the Western railroads, as set forth in the employes' exhibits, can leave no doubt that the railroads are able to pay reasonable advances in wages without detriment to their bond and stockholders, and without interfering with necessary improvements to, or extensions of, their properties. The aggregate surplus of 43 representative Western companies, parties to the present proceedings, reported on June 30, 1914, was \$625,895,415, of which sum \$208,278,196 was in actual cash available. Less than one per cent of the Western railroads (the finances of which had been under proper management) were operated at a deficit during the fiscal year 1914. The amount disbursed in dividends by Western railroads was greater in 1914 than in 1913 or in 1910. Many Western railroads, it was also shown, have concealed assets of great value. The timber, oil, and mineral lands of the Southern Pacific have been estimated to have a value \$666,000,000 greater than that reported to the Interstate Commerce Commission. The Northern Pacific, Santa Fe and other companies have also between \$50,000,000 and \$100,000,000 in

timber holdings which do not appear among their reported assets.

Immense financial resources, which should now be available, have been shown to have been dissipated by improper financial management. Of the dividends paid in 1914, more than \$43,000,000 was disbursed by Western railroads on fictitious capital stock. The evidence shows that during the past ten years more than \$250,000,000 was given away in stock bonuses by only eight representative Western railroads. It was also shown that, during recent years large amounts have been lost in commissions and discounts paid to bankers. Banking control, it was shown, had become so concentrated that practically all Western railroads were controlled by the Morgan and Rockefeller groups of affiliated banking institutions. The fact was clearly proven that no Western railroad, whose finances had been properly managed, is in an unfavorable financial condition at the present time. It was also shown from the operating reports of the railroads that, whatever ill effects Western railroads had suffered from the business depression of 1914, were rapidly passing away in the upward trend of trade and industry.

A great opportunity to bring about industrial peace, and the hearty co-operation of the employers and the employes, has been lost by the failure of the Board to equitably and justly settle the questions involved. We believe the public is greatly interested in the safe and proper operation of railroads, and we had hoped that, by this award, the question of wages and working conditions would be settled and allowed to rest for several years; but to expect such a condition when the finding of the Board becomes public, is hopeless.

As representatives of the engineers and firemen, we hold that the information shown by some railroads' exhibits is calculated to mislead, and inaccurately represent the actual facts. We fully appreciate that the wages of engineers and firemen, in some instances, as set forth in railroad exhibits, might appear liberal when the aggregate amounts only were considered; but, close investigation in every such case revealed the fact that the engineers and firemen had either run a great number of miles or worked from thirteen to twenty hours per day during

the month; and we believe that such a plan is not proper to determine whether compensation is fair or unfair.

An attempt to pursue such a method would compel the toiler to work more hours instead of raising the rate per hour, and this certainly would not be in accord with the principle of increasing labor's share of results produced. If such a reactionary policy is to govern this Board we are glad for the privilege given us by the law to file a dissenting opinion in order that we may voice our disapproval of same, for, surely, no act by a Government tribunal could more keenly bring home to the wage earners of this great country the consideration they might expect if Boards, under Government supervision and control, were to review and adjust their wages and working conditions on that basis. The whole theory is so repugnant to us that we feel it our duty to advise not only all railroad employes, but every organization of labor, to seek, by every influence, to secure the revocation of a law that has the smallest tincture of that principle embodied therein; for we believe that the application of such a theory brings us back to the practices and conditions of two hundred years ago, and if allowed to flourish and grow will rapidly place the American wage earner in a condition similar to that of the Mexican peon.

The rates awarded here and the principles promulgated simply mean a sure and gradual decline in rates of pay now existing; for the rates awarded, while tabulated as minimum rates, will, in effect, prove to be the maximum rates on many roads. The decision of this Board makes it practically impossible for the rates granted by the award to be increased except by another concerted movement, as it can be safely assumed no manager will increase any rate through mutual negotiations. Therefore, this Board, by its award, has created a condition that forces the employes to regard the rates fixed as maximum.

To more clearly illustrate this point, the rate now paid on the Chicago, Milwaukee & St. Paul Railroad per 100 miles in through freight service is \$5.55 for engines with weight on drivers from 200,000 to 225,000. The award not only fixes the rate at \$5.45 per 100 miles, but provides that this rate shall apply to all engines under 250,000 on drivers, thereby reducing the rate and increasing the labors of engineers and firemen. The

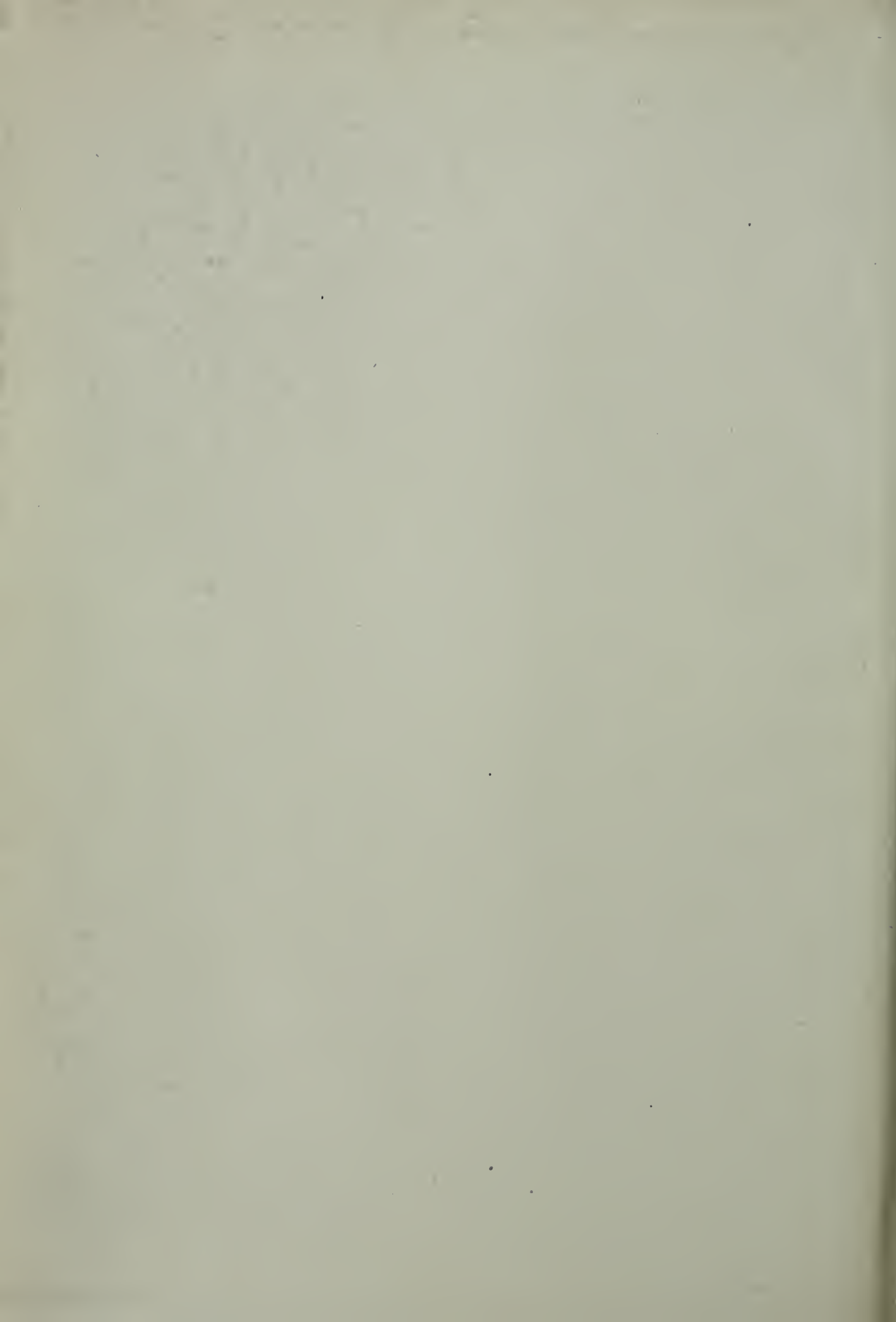
rate now in effect on a number of railroads per 100 miles is \$5.65 for engines weighing from 225,000 to 250,000 on drivers, and, the awarded rates being \$5.45 per 100 miles, it must be apparent that roads purchasing these large engines in the future will be under no obligation to pay the rate that now obtains on neighboring lines, but will apply the rate fixed by this Board which simply means a gradual decrease of rates fixed by mutual agreement through the evolution of the minimum rate to the maximum rate.

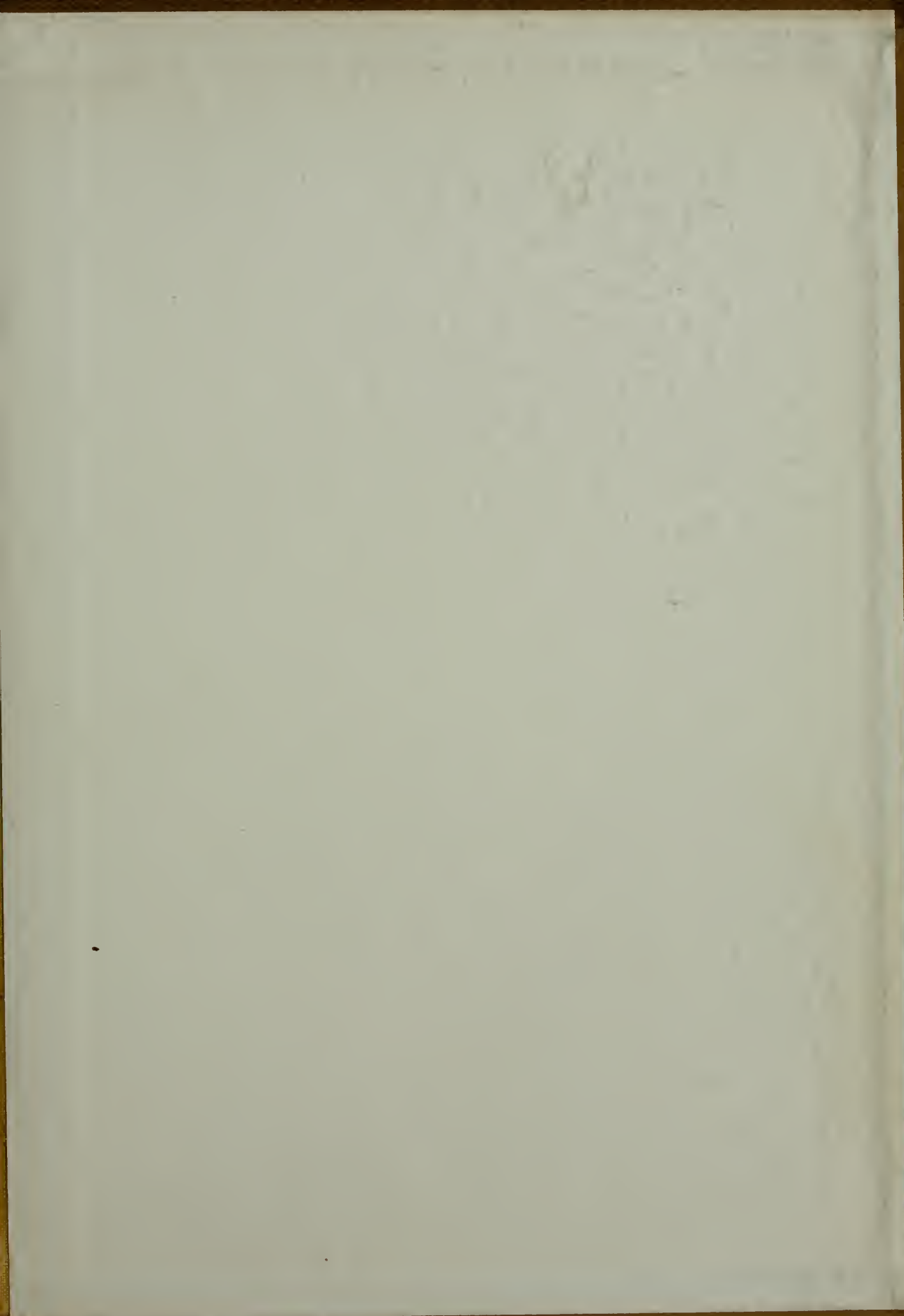
We could at great length give numerous illustrations of this kind, which apply equally to engineers and firemen, but our only purpose is to show the unfairness of the award as handed down by a majority of this Board and this, in our judgment, compels us to file a dissenting opinion; to do otherwise would tacitly give assent to an award that does not permanently settle any of the questions involved, and one that unquestionably will create chaos and ill-feeling among all classes of train service employees and particularly engineers and firemen.

While it is true that we have supported and agreed with a few of the findings as set out in the Award, yet they are so few in number, and their relative importance so insignificant as compared with the remainder, that we do not see any advantage in specifically referring to them.

(Signed) TIMOTHY SHEA, Arbitrator.

(Signed) F. A. BURGESS, Arbitrator.





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